

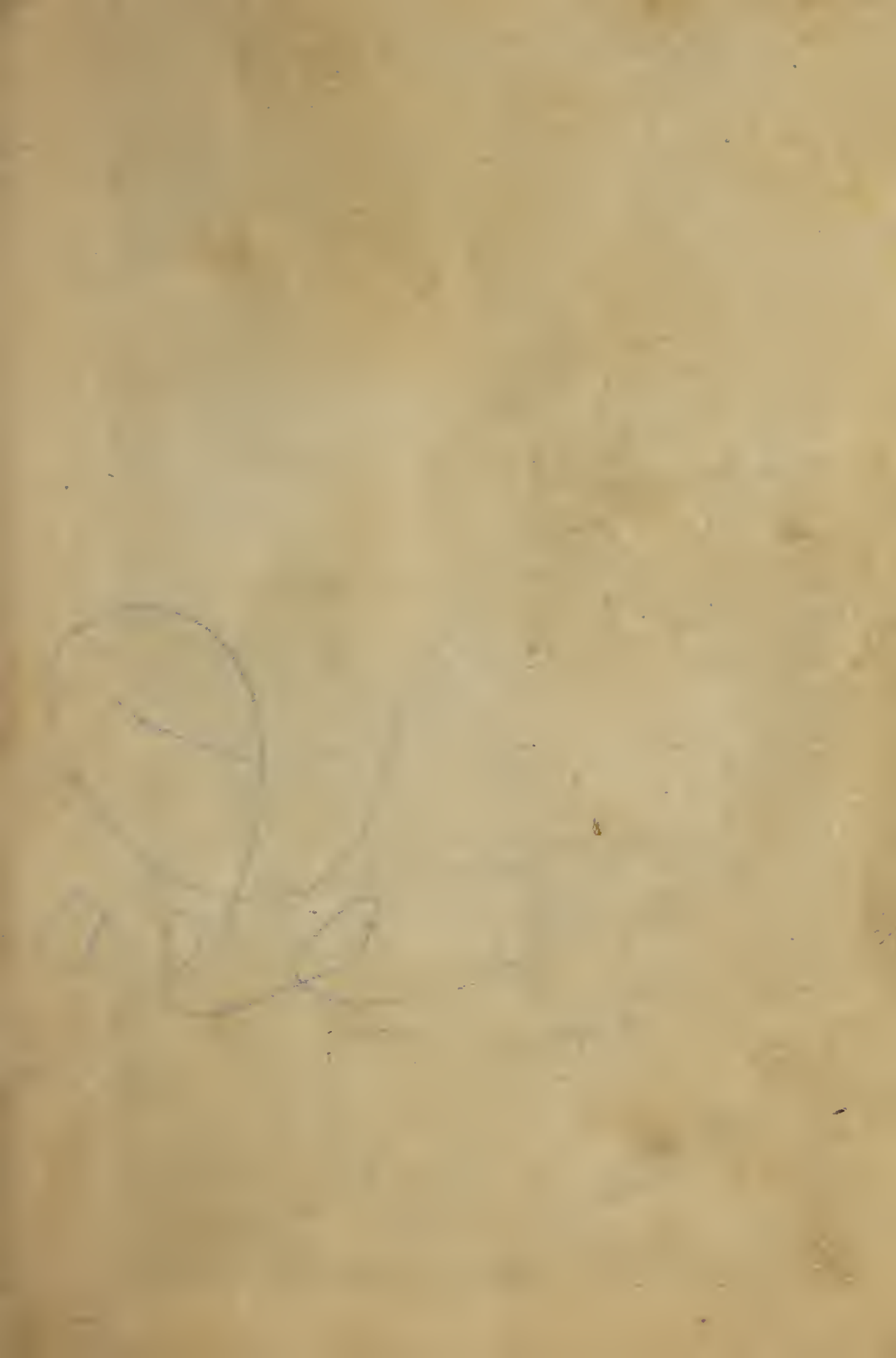
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Join voices all ye living souls : ye Birds,
That singing up to Heaven gate ascend, 1

Bear on your wings and in your notes His praise . . .
His praise who out of darkness called up lig Milton.

THE
BOOK
OF
BIRDS.

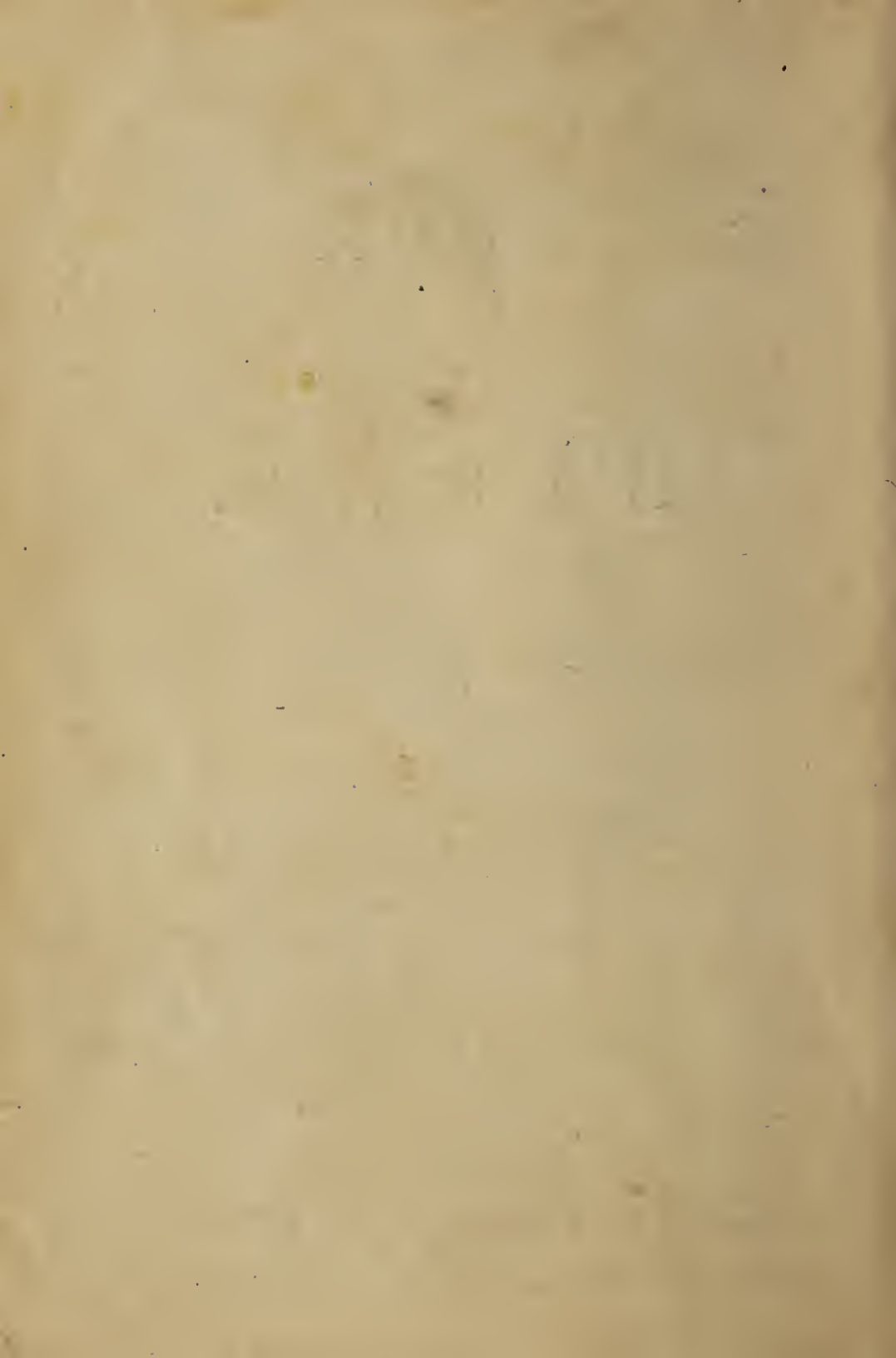
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THE BOOK OF BIRDS.

Meanwhile the tepid caves, and fens, and shores,
Their brood as numerous hatch, from th' egg that soon
Bursting with kindly rupture forth disclosed
Their callow young. * * * * *

Part loosely wing the region, part more wise
In common ranged their figure, wedge their way,
Intelligent of seasons, and set forth
Their aëry caravan high over seas
Flying, and over lands, with mutual wing
Easing their flight ; so steers the prudent crane
Her annual voyage, borne on wind ; the air
Floats as they pass, fanned with unnumbered plumes.
From branch to branch the smaller birds with song
Solaced the woods, and spread their painted wings
Till even ; nor then the solemn nightingale
Ceased warbling, but all night tuned her soft lays.
Others on silver lakes and rivers bathed
Their downy breast. The swan with arched neck,
Between her white wings mantling proudly, rows
Her state with oary feet ; yet oft they quit
The dank, and, rising on stiff pennons, tower
The mid aërial sky : others on ground
Walk firm ; the crested cock, whose clarion sounds
The silent hours, and th' other whose gay train
Adorns him, coloured with the florid hue
Of rainbows and starry eyes.

INTRODUCTORY CHAPTER.

THAT branch of natural history which treats of birds, is called ORNITHOLOGY, from two Greek words, meaning *a bird*, and *a history*, or *discourse* ; so that the meaning of the term is, *a bird history*.

In no part of the animal kingdom, perhaps, are the bountiful provisions of the Creator for the well-being of his creatures more pleasingly illustrated, than in this class; the splendour of their plumage, the elegance of their forms, and the gracefulness of their actions, never fail to attract our attention. But how much more worthy of admiration are the beautiful contrivances by which they are fitted for the life they are destined to lead!

Two very opposite qualities (great muscular power, and at the same time a small comparative weight,) were evidently needed, to enable a living creature to support itself in so rare a medium as air; and, to that end, we find these properties combined in the highest degree of perfection in birds. In the first place, their bones, instead of being nearly solid, as is the case among the beasts, are hollowed out like cylinders, and, although at first sight it might be supposed that this construction would render them less strong, it can be proved by experiment, that the contrary effect is produced, and that the same quantity of material, if formed into a hollow tube, would be less easily broken than if it had been made into a solid column of the same length.

THE ORGANS OF MOTION IN BIRDS.

BIRDS being intended to move in the air, and only in a few instances to spend much of their time on the ground, have the muscles of the legs comparatively small, while those by which the wings are moved are more than four times the weight of all the others put together. In all other animals, the *sternum*, or breast-bone, to which the muscles by which the fore-limbs are moved are attached, is narrow and inconsiderable; but in a bird this bone is broad and large, and has in addition a

strong prominence, or *keel*, to which the enormous muscles already mentioned are fixed. We can easily tell, by inspecting this bone in a bird, the powers of flight which were possessed by the individual to whom it belonged; in the common fowl, and all those birds that rarely quit the ground, the *keel* is small and little prominent, while in the Eagle, and in all the tribes whose flight is rapid, it is large, deep, and strong: but many, perhaps, will be surprised to learn that it is much larger still, in proportion to the size of the creature, in the tiny Humming-bird. The *position*, also, of the great muscles we have mentioned, is of great service in keeping the bird steady in its flight, being of much the same use to the animal as ballast is to a boat; and placed in the same relative situation. The wings and tail, by which its motions are guided, are also formed with the same regard to their intended uses. The arrangement of the wing-feathers is such as to form a hollow in the under part, giving the wings, in this manner, a greater *hold*, as it were, of the air; and the curious formation of the edges of the quill-feathers, which link into each other by means of hooks, prevents their being separated by the resistance of the atmosphere.

A curious provision is made to prevent the possibility of a bird falling from its perch through fatigue or otherwise. This consists in a series of long muscles, or rather tendinous cords, fixed to the lower part of the skeleton, running down behind the thigh-bone, and in front of the leg, to the toes; and so contrived, that the simple weight of the bird, in a crouching position, causes the toes to retain the grasp of the perch.

We know, by our own feelings, when running, or in any other way violently exerting ourselves, the necessity

there is for a greater supply of air than in ordinary cases, —that is, we are obliged to breathe more rapidly. The exertions of a bird in its flight are infinitely greater than any that can be borne by the swiftest land-animal, and we find, therefore, the blood more exposed to the influence of the air in this class than in any other, for it not only freely enters the lungs, but penetrates by numerous openings into every part of the body: and as the heat of the blood is in proportion to the rapidity with which it moves, and to its more perfect exposure to the influence of the external air, we find the blood of a bird much warmer than that of a quadruped, and it is enabled to endure a much greater degree of fatigue.

THE NESTS OF BIRDS.

A BIRD is an *oviparous* animal, that is, its young are produced from an egg, which is hatched by the natural heat of the parent, who sits for many days, with the most unwearied diligence, on the nest she has formed for the purpose.

In the formation of these nests birds display a most wonderful instinct: those of one species, in every situation, and under all circumstances, forming these dwellings for their young upon one model; and the method that each follows appears to be that which is best adapted to the well-being of its progeny. The nests of the larger birds are of the most simple description, while those of the smaller species are formed with great care, and evidently with the express intention of concentrating and retaining heat as much as possible; and all this is necessary; for the larger bird, while sitting on its eggs, can supply sufficient heat from its own body to hatch its young, and the eggs themselves being larger, will not

so quickly cool during the temporary absence of the mother. On the contrary, in the smaller kinds, the eggs would retain their heat but a very short time, if exposed to the air.

The materials, and the mode of formation, of these nests are well worthy the attention of the naturalist. The Kingfisher lays its eggs on the hard ground, in any deep hole it chances to find, on the banks of the river it frequents. The nest of the Spotted Rail is formed of rushes, and such light materials as will float, and being fastened to the plants that grow by the side of the water, is left to rise and fall with the tide. At times it has been known to break loose from its mooring; and in those cases the female bird may be seen quietly seated on her nest, and floating gently down the stream.

The Ostrich deposits its eggs in a hole rudely formed in the sand.



NEST OF THE OSTRICH.

The *Loxia sociæ*, natives of Africa, instead of building their nests singly, combine for the purpose of security,

and form a sort of town, or common dwelling, in which the habitation of each pair is distinct, although the whole mass is united in the singular manner represented in the engraving.



UMBRELLA NESTS OF THE LOXLÆ SOCIÆ.

The nest of a species of Swallow, common on the coast of China, is composed of glutinous substances, which, when dry, resemble isinglass. These nests are sought after by the natives with great perseverance, on account of the high price which they fetch; the Chinese epicure considering them delicious ingredients in a kind of soup which is eaten on great occasions. To obtain this luxury, great dangers are encountered by the men engaged in procuring them. The birds in general build these dwellings in the deep recesses of the caverns which are formed in the coast by the action of the sea; through the accidental openings in the roofs of these caves, the

adventurous Chinese is lowered by means of a rope, on the strength of which, and on that of his companion above, he has to depend for safety ; for should either fail, he would be at once precipitated on the sharp edges of the rocky fragments beneath him, and swallowed up by the boiling surges which are constantly beating against the sides of the cavern.



NEST OF LONG-TAILED TITMOUSE.

The nest of the Long-tailed Tit is formed somewhat like an egg, and has but a small opening at the top ; the inside is lined with feathers, one of which is always found covering the entrance, and placed in a slanting direction, so as to carry off the rain, and prevent its entering the nest. If the finger is introduced into this hole, it will be

found that other feathers cross each other in various directions, all placed there with the same intent. If the nest is built in an old black-thorn in blossom, as was the case with that represented in the cut, the outer part of it will be found covered with small pieces of light-coloured moss, and other substances, so exactly agreeing in colour with the bark of the tree in which it is placed, that it can with difficulty be discovered. Had the colour of the tree been green, the moss selected as a covering for the nest would have been of the same hue.



NEST OF THE REED WARBLER.

The nest of the Reed Warbler is very curiously suspended about a foot above the water, safely bound to the stems of reeds. During the breeding-time this bird sings incessantly, night and day, imitating by turns the notes of the Sparrow, the Swallow, the Skylark, and other birds, from whence it is called the English Mock-bird. It is stated by Buffon, that the young ones, though not yet fledged, will desert the nest if it be touched, or even if a person goes too near it.

The Cuckoo, again, forms no nest of its own, but lays its eggs, usually but one, in that of some other bird; in general it selects the nest of the Hedge Sparrow.

The Eider Duck, in forming a dwelling for its young, is a perfect contrast to the apparent inhumanity of the last bird. The breast of this beautiful Duck is covered with a quantity of delightfully soft and elastic down, and the fond mother tears this covering from her own bosom for the purpose of lining the nest in which her young are to be hatched.

THE MIGRATION OF BIRDS.

THE migration of birds, that is, their periodical arrival at, and departure from, various countries, has been the subject of many speculations. The Duck tribe, and the whole of the water-birds, evidently come from the higher latitudes of the north, to seek a more temperate climate, where food is in greater abundance. The Nightingale, the Swallow, the Cuckoo, and many others that visit us in the Spring, spend their Winter in more southerly regions, and appear among us for the purpose of laying their eggs and rearing their young. In this case, also, a plentiful supply of food is no doubt the cause of their appearance. The immense distance from which many

of our Spring birds come, has caused it to be believed, that they are under the necessity of making the most fatiguing and lengthened journeys. That birds are able to perform amazing flights there is no reason to doubt, so many instances of the fact being on record ; and that large flocks of migrating birds have been met with several hundred miles out at sea is also certain ; but it is probable that, in the latter case, their appearance is to be attributed to the effects of tempests, which have driven them from their intended course ; for in no instance do we find useless labour imposed upon any part of the creation. Our Spring visitants pass their Winter on the northern coasts of Africa, and by inspecting a map it will be seen, that, supposing a bird should leave Algiers, and direct its course in a straight line to England, the greatest expanse of water it would have to cross could not exceed two hundred miles, and by resting at the different islands of the Mediterranean, its journey might be divided into several stages ; but even the whole distance, from continent to continent, might be accomplished with ease in a short time, for the flight of a bird is equal to the rate of from fifty to eighty miles an hour ; but it is very probable, that even a journey of the length we have mentioned is but seldom undertaken, and that the migration of these visitors from the warmer climates is performed by easy journeys, along the coast of Africa to the west, through the whole of Spain and France, and across from the north-west coast of that country to the southern shores of England.

THE VOCAL POWERS OF BIRDS.

NOT the least part of the pleasure we derive from the contemplation of this beautiful class of creatures, con-

sists in the variety and beauty of the song of many species. The power of voice possessed by a bird depends, in a great measure, on the more or less complex nature of the muscular apparatus by which the lower part of the windpipe (the organ of sound) is directed.

In the King Vulture, the Condor, and the Spoonbill, these muscles are entirely wanting. The Falcons, Owls, and most of the swimming birds, possess but one pair. The Indian Crowned Pigeon, the Velvet Duck, and some others, have two pair. The whole of the Parrot tribes are possessed of three pair; and the song birds have as many as five to direct their delicate organs. Their power of producing a variety of sounds is also influenced by various modifications of the course of the windpipe, and by many curious contrivances attached to the same organ.

THE ORGANS OF DIGESTION IN BIRDS.

THE whole of the class AVES may, in a general way, be divided into, the *carnivorous*, which feed on flesh; and the *graminivorous*, whose principal food is of a vegetable nature. The former of these, like the ferocious animals among the beasts, have very short intestines, the craw extremely small, and the gizzard bearing a great resemblance to a stomach; on the other hand, the Graminivorous birds have the intestines extremely long, the craw large, and performing the part of a stomach, by softening the food; and, in addition to this, possessing a gizzard capable of grinding down the hardest substances.

“The extraordinary power of the gizzard in grinding whatever hard substance is submitted to its action, to prepare it for digestion, almost exceeds the bounds of credibility. In its mechanical powers and operations,

it bears a strong resemblance to a corn-mill; the upper part serves as a receptacle for the grain; two internal projecting oval surfaces correspond to the mills-tones. Numerous ingenious, though very cruel experiments, have been made by anatomists and others, to try the powers of this *animal mill*. Turkeys and common Fowls have been made to swallow sharp angular fragments of glass, metallic tubes and balls armed with needles and even lancets, covered with a coating of paste or bread, to prevent injury to the throat while passing into the stomach. All these hard substances, sharp edges and points, were, upon examination, eighteen or twenty hours after they were swallowed, found broken and ground down, the coats of the gizzard having sustained no apparent injury.

“In this wonder fulprocess, the muscular action of the organ is doubtless very materially assisted by the numerous small stones and pebbles uniformly found in these muscular stomachs. The size of these stones is in proportion to that of the bird; their number also varies according to circumstances.”

THE CLASSIFICATION OF BIRDS.

As among the Mammalia the place of an individual in the system is decided by the formation of the organs of mastication and defence (the teeth and feet), so in this class the formation of the beak and claws is in general referred to for the same purpose. Indeed, the plumage of birds is so changeable, that much confusion would result from paying too strict an attention to it. All birds *moult*, that is, partially lose their feathers, and acquire new ones, twice in the year. In many instances, the Winter covering is entirely different from

that of the Summer. The plumage of the male in general varies greatly from that of the female. The young bird changes its feathers several times before it assumes the colour of the old one; among birds of prey, three or four years elapse before it has gone through all its changes: from all these causes, the same bird is frequently described as a new species, when it sometimes happens to be merely an old acquaintance in a new coat.

The whole of this class has been divided by Cuvier* into seven ORDERS, namely:—

ACCIPITRES, *Plunderers*, with strong hooked beaks and powerful claws.

PASSERES, *Small Birds*, [which differ much from each other, but possess none of the distinctive marks of the other orders.

SCANSORES, *Climbers*, with two toes placed forward and two backward.

GALLINÆ, birds resembling the common cock.

CURSORES, *Runners*, with long legs and short wings, frequenting deserts and plains.

GRALLATORÆ, *Waders*, with long legs and neck, for procuring their food in shallow waters.

PALMIPEDES, *Swimming Birds*, with toes connected by a membrane, long neck and short legs.

* We have adhered in these little treatises to the arrangement of this celebrated Naturalist, because, although, in some instances, later writers have deviated from his system, still, as a whole, nothing equal to it has as yet made its appearance: and in addition to this, the notice of these variations would only tend to confuse the mind of the young reader, until he had become perfectly acquainted with the present system; on which, in fact, all later arrangements have been founded.

CLASS AVES.

OF BIRDS OF PREY.—(Order ACCIPITRES.

Plunderers.)

THE whole of this formidable order of birds may be distinguished, at the first glance, by their strong hooked beaks, and sharp and powerful claws. Unlike the more harmless races, they, with the exception of some species of the Vulture tribe, never live in communities, and always avoid the haunts of man. They are to be found singly or in pairs, frequenting the lonely cliffs that overhang the sea, the highest trees in the most unfrequented forests, and the loftiest habitable spots of the mountain-chains both of the Old and New Continents. They have been arranged in two principal groups,—the *Diurnal*, who seek their prey by day, as Vultures, Eagles, Hawks, &c., and the *Nocturnal*, who hunt by night, including every species of Owl. The diurnal birds of prey have been separated into two *families*, the Vultures and Falcons. In all this class, we generally find the female nearly one-third larger than the male.

OF DIURNAL BIRDS OF PREY.

THE VULTURE TRIBE.

IN the warmer latitudes of the earth, where numerous species of these useful, though filthy birds are to be found, they may be ranked, in spite of their appearance and habits, among the benefactors of mankind, performing the same offices as the Chackals and Hyænas, and

endowed with the same propensity for putrid food. In the southern parts of the United States their value is so well understood, that a fine is imposed on those who wilfully deprive them of life. With the exception of one species, the whole of the Vultures may be known by their long naked necks, their beak, which is longer and less arched than in the other tribes, and their shorter and less powerful claws.

THE KING OF THE VULTURES, (*Sarcoramphus papa*. Dumeril.)

Is the most splendid in its colours of the whole of this tribe: its plumage is variegated with gray, flesh-colour, fawn, and black; its beak is pink and black, and its comb of a brilliant orange; around the eye is a circle of bright scarlet, while the front of the neck is striped with clear blue. The splendid colours of this bird appear not to have been the only cause of its obtaining the name of King of the Vultures; for, according to the accounts of a recent traveller, the common carrion Vultures stand so much in awe of it, that they will remain patiently waiting at a considerable distance from their expected banquet, until his majesty has satisfied his appetite. Much has been said about the acute sense of smell possessed by these birds, but several experiments which have been made appear to show, that they are more indebted to their extraordinary powers of vision for the discovery of their food, than to their scent; however this may be, the gathering of the Vultures to their feast is described as a most extraordinary sight, and is thus spoken of by a recent traveller:

“Desirous of observing how great a number of Vultures could congregate together in a short space of time,

I concealed myself one day in a thicket, after having killed a large Gazelle, which I left upon the spot; in an instant a number of Ravens made their appearance, fluttering about the animal, and making a great croaking. In less than half an hour these birds were reinforced by the arrival of Kites and Buzzards, and immediately afterwards I perceived, on raising my head, a flight of birds at a prodigious height, wheeling round and round in their descent. These I soon recognised to be Vultures, which seemed, if I may so express myself, to escape from a cavern in the sky, hastening to their filthy repast, directed by the guiding hand of an all-seeing Providence to perform the duties imposed upon them, and to fulfil their part in the scale of the Creation."

THE CONDOR, (*Sarcorampus gryphus*. Dumeril.)

THIS magnificent bird is found in South America, inhabiting the lofty ranges of the great chain of the Andes; there, on the borders of perpetual snow, in solitary grandeur, he roams at will, the lord of those sterile regions, at times only descending upon the plain in search of food. Unlike most of its tribe, it seeks for living victims; its power is so great, that two or three Condors have been known to destroy a Bullock; this they effect by means of their powerful beaks, attacking the animal about the head, and striking at its eyes. The almost inaccessible mountains which the Condor inhabits, and the imperfect accounts received from travellers who have been in those regions, have been the cause of much exaggeration with regard to its size and power. If the relations of early travellers were to be believed, the fabulous Roc mentioned in the *Arabian Nights' Entertainments*, had found a living representative in the Condor Vulture. The

first authentic description of this bird brought to Europe was that of Baron Humboldt: this celebrated traveller



THE CONDOR.

states, that the largest Condor he was able to procure did not exceed nine feet from tip to tip of its wings, when expanded, and the largest he could get any account of in the country measured about twelve feet.

Its tenacity of life is perhaps as extraordinary as its great strength; it has been known to receive as many as four musket-balls in the body without falling, and endeavours to strangle it have been almost ineffectual.

The Condor, like all birds of prey, is four years of age before it assumes the plumage of the adult. The head of the male bird is decorated with a kind of crest, as may be seen by the engraving; but in the female this ornament is wanting. According to Humboldt, it builds no nest, but it lays its eggs, generally two in number, on the bare rocks.

THE CARRION VULTURE, OR TURKEY BUZZARD, (*Cathartes aura*. Illiger.)

Is very common in the central parts of America; its general colour is a brownish black; it is about the size of a Turkey, and at a short distance, owing to the red colour of the neck, might be easily mistaken for that bird. Like all the rest of their tribe these birds feed on carrion, and when once they have found a carcass, they will remain on the spot, if not molested, till the whole is devoured; at such times they eat so immoderately that they are frequently incapable of rising, and may be caught without much difficulty; but few that are acquainted with them will have the temerity to undertake the task. "A man in the State of Delaware," says Wilson, "a few years since, observing some Turkey Buzzards regaling themselves upon the carcass of a horse, which was in a highly putrid state, conceived the design of making a

captive of one, to take home for the amusement of his children. He cautiously approached, and springing upon the unsuspecting group, grasped a fine plump fellow in his arms, and was bearing off his prize in triumph, when lo! the indignant Vulture disgorged such a torrent of filth in the face of our hero, as for ever cured him of his inclination for Turkey Buzzards."

THE GRIFFON VULTURE,

(*Vultur fulvus*. Gmelin.)

THIS bird is more generally spread over the warmer parts of Europe, Asia, and Africa, than any other species,



THE GRIFFON VULTURE.

and is the largest bird of prey belonging to the Old World. Unlike the rest of its tribe, the back part of the head and neck is covered with short white down or feathers, with a slight tinge of blue; at the lower part is a collar, or a ruff of downy feathers, of pure white; altogether it is a most majestic bird, and has but little of the debased cast of countenance of Vultures in general. In Summer it is frequently found in the lofty ranges of the Alps and Pyrenees, but it inhabits also many other mountainous tracts, from Siberia, where it was seen by Pallas, to Abyssinia, where it was recognised by Bruce.

THE FALCON TRIBE.

THE Falcon tribe includes the whole of the remainder of the *Diurnal* birds of prey, and consists of Falcons, Eagles, and Hawks. The Falcons may be said to be all those birds of this tribe which it has been found possible to reduce, in a considerable degree, to the control of man; on that account they have been called *noble*, while the remainder, having never been completely tamed, have had the term *ignoble* applied to them. The Falcons, in this sense of the word, may be known by having their wings as long, or longer, than the tail; and by their beak, in which there is a well-defined notch, or tooth.

Falconry, the art of training birds of prey to the pursuit of Herons and small animals, was, in former times, the amusement of nobles and sovereigns throughout the whole of Europe; and with so much ardour was this diversion pursued, even as late as the reign of James the First, that a Sir James Monson is said to have given as much as a thousand pounds for a cast of

Hawks; the laws, also, were extremely rigorous for the protection of this sport. In the thirty-fourth of Edward the Third it was made felony to steal a hawk; and to take its eggs, even on a person's own ground, was punishable with imprisonment for a year and a day, besides a fine at the king's pleasure. In the reign of Elizabeth the imprisonment was reduced to three months, but the offender was to find security for his good behaviour for seven years, or remain in prison till he did. The office of Grand Falconer to the king still exists, but the pastime itself has nearly passed away.

As the variety of changes which the plumage of birds of prey undergoes before the young has attained the clothing of the adult, have tended materially to render their history uncertain, we shall confine ourselves to an account of some of the best-known species.

The rapid flight of the tribes we are about to describe would scarcely be credited, if the accounts did not rest on the most conclusive evidence. A Hawk has been known to fly as much as 150 miles in the space of an hour, and is able to continue his flight for hours together, at the rate of ninety miles. Quickness of sight is so intimately connected with the power of rapid flight, that we might be led to expect some peculiar contrivance for the preservation and perfection of the eyes in birds. The eye in these animals possesses a singular apparatus, which tends materially to these ends; it is called the *nictitating*, or winking membrane, and consists of a thin semi-transparent fold of skin, which can be drawn across the eye like a curtain, at the pleasure of the bird. In the Falcons and Eagles it is extremely perfect, and answers a double purpose, that of clearing the surface from dust and other injurious substances, and of shielding

the eye from the direct rays of the sun during their lofty flights. A covering of feathers upon the heads of these birds, which is particularly close over the eyes, gives an air of great dignity and grandeur to their aspect, and distinguishes them readily from the Vultures. The strongly-arched form of their beak also materially assists in giving a nobleness to their look; while the daring manner in which they take their prey and defend their young, creates a kind of admiration of their courage.

THE PEREGRINE FALCON,

(*Falco Peregrinus*, Gmelin.)

HAS been found in almost every part of the globe, and from this circumstance it takes its name, *Peregrinus* (the wanderer). It is the species that was most usually employed in Falconry. In size it is nearly equal to a common fowl, and may be known by a triangular black spot on the cheek. It builds in the steepest rocks, and its flight is extremely rapid. In taking its prey, it pounces on it as if it fell from the clouds. The male is used against Magpies and small birds, and the female against Pheasants, and even Hares.

The life of this bird is extremely long. A Falcon belonging to James the First, with a gold collar round his neck, dated 1610, was found in 1793 at the Cape of Good Hope, and, although more than 180 years old, was still tolerably vigorous. This account, however, must be received with some caution, as it is possible that the collar had been placed on the neck of some other bird.

THE MERLIN, (*Falco Aesalon*. Temminck.)

THE Merlin is the smallest of all the British Hawks, scarcely exceeding the size of the Blackbird; but, though

small, it is not inferior in courage to any of the Falcon tribe. It was used for taking Larks, Partridges, and Quails, which it would frequently kill by one blow, striking them on the breast, head, or neck. Buffon observes that this bird differs from all other birds of prey, in the male and female being of the same size. The Merlin does not breed in England, but visits us in October, and remains during the Winter. Flying low, and with great celerity and ease, it preys on small birds; and breeds in woods, laying five or six eggs.



THE SPARROW-HAWK.

THE MERLIN.

THE SPARROW-HAWK, (*Falco nisus*.)

The length of the male Sparrow-Hawk is about twelve inches, that of the female fifteen; it is a bold and vigo-

rous bird, and very numerous in various parts of the world, from Russia to the Cape of Good Hope. The female builds her nest in hollow trees, lofty ruins, and, sometimes, in old Crows' nests. The Sparrow-Hawk is very docile, and easily trained to hunt Partridges and Quails ; but it makes great havoc among the Pigeons, and in the Poultry-yard.

THE GOLDEN EAGLE, (*Falco chrysaëtos*.)

THE Golden Eagle is the largest of the Falcon tribe, and the most powerful of the European birds of prey ; when full grown it will measure, frequently, full seven feet in the expanse of its wings. In the beginning of January, 1735, a very large one was shot near Warkworth, in Northumberland, which measured, from point to point of its wings, eleven feet and a quarter.

It builds its nest in all the mountain-ranges of Europe, in Asia Minor, Tartary, Siberia, and the north of Africa, as well as the northern parts of America. In Europe it is most frequently met with in Russia, Sweden, Scotland, the Tyrolese and the Swiss Alps, and the Pyrenees. Its nest is built like a platform of several feet in width, made of sticks and branches of trees, interlaced with smaller twigs, and covered with reeds and heath ; the eggs laid by the female seldom exceed two or three in number. The Golden Eagle is said, in former times, to have been employed in Falconry, but to have been extremely untractable. At present, in some parts of the East, some use is made of these birds in the chase of Deer and other animals.

THE SEA EAGLE, (*Aquila ossifraga*. Brisson.)

THIS bird, although not so large as the last-mentioned, is considered much more fierce and sanguinary in its disposition; its chief prey consists of fish, which it



THE YOUNG SEA EAGLE.

captures with great dexterity; it feeds also on the smaller kinds of land-animals. A story is told of one of

these birds having seized a Cat, and borne it off in its talons ; shortly afterwards it appeared to be in great distress, and was ultimately brought to the ground, overpowered by the desperate efforts of its victim ; a casualty which does not, of course, occur with its more common prey, "the timid hare." It is a well-known bird on most of the sea coasts of Europe.



AN EAGLE SEIZING ITS PREY.

THE WHITE-HEADED SEA EAGLE, (*Aquila leucocephala*.)

THIS noble bird is a native of North America, and frequents the cliffs and forests of that vast continent, in the neighbourhood of the sea. The food of the White-headed Eagle consists principally of fish ; but in times of scarcity it retires inland, and commits great havoc, by

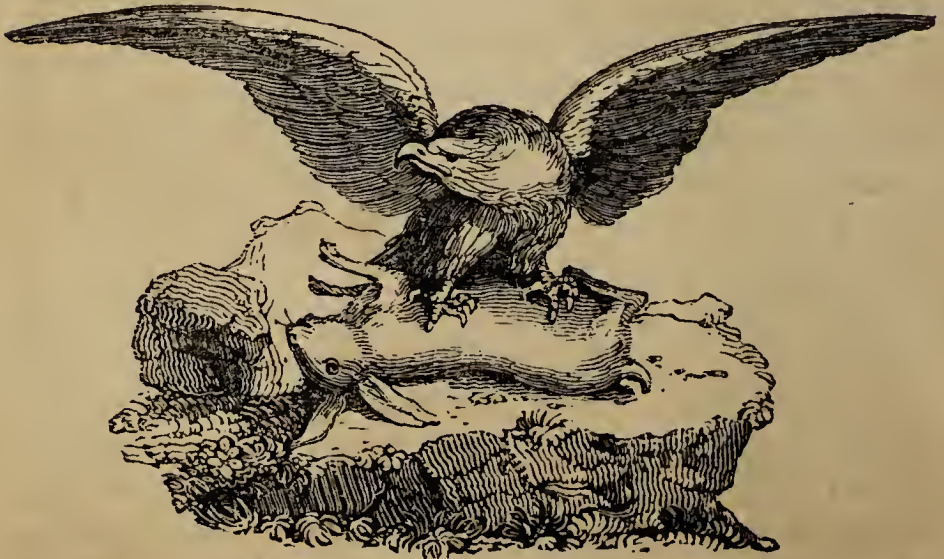
destroying vast numbers of young pigs, and other small animals. The following description of its habits is extracted from Wilson's celebrated work on American Birds:—

“Formed by nature for braving the severest cold; feeding equally on the produce of the sea and of the land; possessing powers of flight capable of outstripping even tempests themselves, unawed by anything but man.

“In procuring his prey, he displays, in a very singular manner, the genius and energy of his character. Elevated on the high dead limb of some gigantic tree that commands a wide view of the neighbouring shores and ocean, he seems calmly to contemplate the motions of the various feathered tribes that pursue their busy avocations below; the snow-white Gulls slowly winnowing the air; the busy *Tringæ* coursing along the sands; trains of Ducks streaming over the surface; silent and watchful Cranes, intent and wading; clamorous Crows, and all the winged multitudes that subsist on the bounty of this vast liquid magazine of nature. High over all these, hovers one whose action instantly arrests his whole attention. By his wide curvature of wing, and sudden suspension in air, he knows him to be the Fish Hawk, settling over some devoted victim of the deep. His eye kindles at the sight, and, balancing himself with half-open wings on the branch, he watches the result. Down, rapid as an arrow from heaven, descends the distant object of his attention, the roar of its wings reaching the ear as it disappears in the deep, making the surges foam around! At this moment, the eager looks of the Eagle are all ardour; and, levelling his neck for flight, he sees the Fish Hawk once more emerge, struggling with his prey, and mounting upwards with screams

of exultation. This is the signal for our hero, who, launching into the air, instantly gives chase, and soon gains on the Fish Hawk; each exerts his utmost to mount above the other, displaying the most elegant and sublime aërial evolutions. The unincumbered Eagle rapidly advances, and is just on the point of reaching his opponent, when, with a sudden scream, probably of despair and honest execration, the latter drops his fish; the Eagle, poising himself for a moment, as if to take a more certain aim, descends like a whirlwind, snatches it in his grasp ere it reaches the water, and bears its ill-gotten booty silently away to the woods."

Unlike the generality of Eagles, he will feed, when pressed by hunger, on the most putrid carrion; and the collected groups of gormandizing Vultures, on the approach of this dignified personage, instantly disperse, and make way for their master, waiting his departure in sullen silence and at a respectful distance, on the neighbouring trees.



AN EAGLE PREPARING TO TEAR ITS PREY.

THE FISH HAWK, (*Pandion haliaetus*.)

THE American Fish Hawks, whose encounter with the Eagle we have just related, will sometimes join together in troops, and, thus united, drive off their oppressor, obliging him reluctantly to procure his own food.

There is one singular trait in the character of the Fish Hawk which has been often witnessed. The Grakles, or Crow Blackbirds, are permitted to build their nest among the interstices of the sticks of which its own nest is constructed, several pairs of these birds taking up their abode there, like humble vassals around the castle of their chief, laying their eggs, hatching their young, and living together in the utmost harmony.

The size of this bird, although not equal to that of the Sea Eagle, is yet considerable, measuring upwards of five feet with its wings expanded. It makes its appearance in the United States in the Spring season, and becomes the harbinger of fine weather and abundance; on this account it is a great favourite with the fishermen. The following song of an American fisherman illustrates this feeling :

The Osprey sails above the ground,
The Geese are gone, the Gulls are flying,
The Herring-shoals swarm thick around,
The nets are launched, the boats are plying.
Yo, ho ! my hearts, let's seek the deep,
Raise high the song, and cheerly wish her ;
Still, as the bending net we sweep,
God bless the Fish Hawk and the Fisher !

She brings us fish, she brings us Spring,
Good times, fair weather, warmth, and plenty;
Fine store of Shad, Trout, Herring, Ling,
Sheepshead and Drum, and Old-wives dainty.

Yo, ho ! my hearts, let's seek the deep,
 Ply every oar, and cheerly wish her ;
 Still, as the bending net we sweep,
 God bless the Fish Hawk and the Fisher !

She rears her young on yonder tree,
 She leaves her faithful mate to mind 'em ;
 Like us, for fish she sails to sea,
 And, plunging, shows us where to find 'em.
 Yo, ho ! my hearts, let's seek the deep,
 Ply every oar, and cheerly wish her ;
 While the slow bending net we sweep,
 God bless the Fish Hawk and the Fisher !

THE KITE, (*Milvus vulgaris*. Fleming.)

THE weapons with which the Kite has been endowed by nature for the purpose of procuring its food, are much less powerful than those of any of the preceding species ; and being unable, therefore, to face its enemy boldly with any chance of success, it is obliged to shun a conflict to which its powers are unequal, and to seek for prey among the smaller kind of animals, as Chickens, Mice, &c., which can offer no effectual resistance ; for this purpose it possesses a most piercing sight, and an amazingly rapid flight. It is easily distinguished from the rest of the birds of prey by its lengthened form, its long powerful wings, and forked tail. Though the Kite weighs somewhat less than three pounds, the extent of its wings is more than five feet.

THE SECRETARY, OR SNAKE EATER,

(*Gypogeranus serpentarius*, Illiger.)

Is found in Southern Africa, and renders great service to the inhabitants, by destroying the Snakes and othe

reptiles with which that country is infested. Although this bird differs in many respects from the rest of the rapacious birds, particularly in the length of its legs and neck, it agrees more nearly with them than with any other race of birds with which we are acquainted. Its mode of destroying its prey is by placing its foot upon the body of the Snake, and striking it violently ; while with one of its wings, which is armed with two projecting spines, or bony prominences, it protects its body from the sting of its victim. It then mounts into the air, and drops it from a considerable height, until it is either despatched or completely disabled, when, if small, it is swallowed whole. The hinder part of the head of the Secretary is garnished with a number of long feathers, which it is able to raise at will, like the crest of a



THE SECRETARY.

Cockatoo. It is from this curious appendage that the bird received its name. The Dutch, at the time of its discovery, were the resident Europeans, and, from their commercial habits, fancied they saw a resemblance between these long feathers and the quill stuck behind the ear of a clerk. In preferring living prey, this bird more nearly agrees with the Eagle than the Vulture.

THE NOCTURNAL BIRDS OF PREY.

THE OWL TRIBE.

THE skull of the Owl, when stripped of its feathers, very nearly resembles that of the Falcons, although the outward appearance of the head is so very different. The feathers with which this bird is covered are extremely soft and light in their texture, and render the motions of the animal scarcely audible while in pursuit of its prey, in the still hours of twilight. Its flight is far from being powerful or rapid, nor is it necessary to its well-being that it should be so, as it chiefly feeds on Rats and Mice, and small birds, which it takes rather by surprise than otherwise. Its sight in the dusk is very good, and its eye is admirably formed for that purpose, being extremely large and projecting, and fixed for protection in a bony circle, somewhat like the frame of a watchmaker's eye-glass. The extreme prominence and lustre of the eyes of an Owl gives its head the appearance of a Cat's, and from this resemblance, in some lan-

guages, the common Screech Owl has been called the *Screech Cat*. The hearing of these birds is, at the same time, very acute, as is, indeed, that of all creatures who hunt by night.

The Owls have been divided into two sections; the *Horned Owls*, who take their name from a tuft of feathers on each side of the crown of the head, and those with *smooth* heads.

THE GREAT-EARED OWL, (*Bubo maximus*),

Is a native of Europe, Asia, and North America, but rather uncommon in England and France, and is said never to have been seen in Holland. In speaking of a species of the Horned Owl found in America, Wilson, the American ornithologist, says, "As soon as evening draws on, and mankind retire to rest, he sends forth such sounds as seem scarcely to belong to this world, startling the solitary pilgrim as he slumbers by his forest fire,

Making night hideous.

Along the mountainous shores of the Ohio, and amidst the deep forests of Indiana, alone, and reposing in the woods, this ghostly watchman has frequently warned me of the approach of morning, and amused me with his singular exclamations; sometimes sweeping down and around my fire, and uttering a loud and sudden, *Waugh O! Waugh O!* sufficient to have alarmed a whole garrison. He has other nocturnal solos still less melodious; one of which very strikingly resembles the half-suppressed screams of a person suffocating, or throttled."

The solemn appearance and retired habits of the Owl have in all ages of the world attracted attention, and it is curious to discover the same bird used as a symbol



THE BARN OWL.

THE LITTLE OWL.

THE EAGLE OR GREAT HORNED OWL.

for the same purposes, by the civilized Greek of antiquity, and the rude Indian of North America. The ancient heathens considered it the favourite of Minerva, their goddess of wisdom; and among the Creek Indians the junior priests or students constantly wear a white mantle, and have a great Owl-skin stuffed very ingeniously, so well executed as almost to appear like the living bird, having large sparkling glass beads, or buttons, fixed in the head for eyes. This emblem of wisdom and divination they wear, sometimes as a crest, on the head, and at other times, the image sits on the arm, or is borne on the hand.

The Blue Jay of America is, of all birds, the most bitter enemy to the Owls of that country. No sooner has he discovered the retreat of one of them, than he will summon the whole feathered fraternity to his assistance, who surround the glimmering *solitaire*, and attack him from all sides, raising such a shout as may be heard half a mile off; the Owl meanwhile returning every compliment with a broad goggling stare. The war becomes louder and louder, and the Owl, at length forced to betake himself to flight, is followed by his impudent persecutors until driven beyond their jurisdiction.

The Jay is not only bold and vociferous, but possesses considerable talent for mimicry, and seems to enjoy great satisfaction in mocking and teasing other birds, particularly the Sparrow Hawk, imitating his cry whenever he sees him, and squealing out as if caught. This soon brings a number of his tribe around him, who all join in the frolic, darting about the Hawk, and feigning the cries of a bird sorely wounded; but this ludicrous farce often ends tragically. The Hawk, singling out one of the most insolent and provoking,

sweeps upon him in an unguarded moment, and offers him up a sacrifice to his hunger and resentment. In an instant the tune is changed; all their buffoonery vanishes, and loud and incessant screams proclaim their disaster.

THE BARN OWL, OR SCREECH OWL,

(*Strix flammea*, Linnæus,)

Is an instance of the second division of the Owls, namely, that with smooth heads, or wanting ear-feathers, and is very common over great part of Europe. The great services performed by this bird for the farmer, by the destruction of Mice and other vermin, are seldom sufficiently appreciated.

Their manner of taking their prey is thus noticed by the Rev. Mr. White, in his *Natural History of Selborné*. "We have had, ever since I can remember, a pair of White Owls, that constantly breed under the eaves of this church. As I have paid good attention to the manner of life of these birds during their season of breeding, which lasts the summer through, the following remarks may not, perhaps, be unacceptable. About an hour before sunset, (for then the Mice begin to run,) they sally forth in quest of prey, and hunt all round the hedges of meadows and small enclosures for them, which seem to be their only food.

"In this irregular country we can stand on an eminence and see them beat the fields over like a Setting-dog, and often drop down in the grass or corn. I have minuted these birds with my watch, for an hour together, and have found that they return to their nest, the one or the other of them, about once in five minutes; reflecting at the same time on the adroitness that every animal

is possessed of, as far as regards the well-being of itself and offspring. But a piece of address which they show, when they return loaded, should not, I think, be passed over in silence. As they take their prey with their claws, so they carry it in their claws to their nest; but as their feet are engaged in the ascent under the tiles, they constantly perch first on the roof of the chancel, and shift the Mouse from their claws to their bill, that the feet may be at liberty to take hold of the plate on the wall, as they are rising under the eaves."

THE LITTLE OWL, (*Noctua passerina*.)

THE Little Owl is about the size of a Blackbird. It sees better in the day-time than other nocturnal birds, and gives chase to Swallows and other small birds, on the wing. It is said to pluck the birds it kills, before it eats them, and in this respect differs from other Owls, who swallow their prey whole, and afterwards disgorge the feathers or hair.

This little Owl is found in most parts of Europe, but is rare in Great Britain; it frequents ruins, and deposits its eggs in such situations more frequently than in trees. It is a bird of a very wild disposition, and the young, when taken even at the earliest age, soon exhibit a ferocious character, and never become so familiar in a domesticated state as the larger kinds. The opening to the ear of all the Owl tribe is extremely large, and is curiously covered with a kind of door or lid of feathers, which can be opened or shut at the will of the bird, whose sense of hearing is, by this contrivance, rendered peculiarly acute.

OF PASSERINE BIRDS.—(Order PASSERES, *Small Birds*.)

THE order of birds we are now about to describe, contains in its ranks many that are very dissimilar in their organization and habits, and, indeed, under the term Passeres are included all those which are not to be found in any of the other orders. On account of their great number, it has been found necessary to divide them into five families, or groups, as follows:—

- Birds with notched or toothed bills . . . Family, *Dentirostri*.
 - Birds with widely-opening bills . . . Family, *Fissirostri*.
 - Birds with thick conical bills . . . Family, *Conirostri*.
 - Birds with slender bills . . . Family, *Tenuirostri*.
 - Birds with toes united . . . Family, *Syndactyli*.
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OF BIRDS WITH NOTCHED OR TOOTHED BILLS. (Family, *Dentirostri*.)

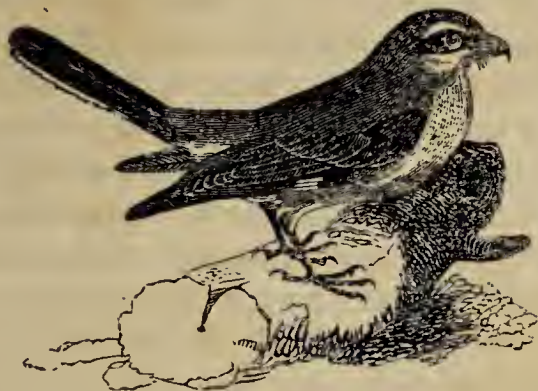
THE *Dentirostri* take their name from two Latin words meaning *tooth* and *beak*, on account of their beaks having a notch or tooth, more or less perfect in the different genera; and they all, to a certain extent, are birds of song. The peculiarities of this family are most apparent in the

SHRIKE TRIBE, OR BUTCHER BIRDS.

THE GREAT SHRIKE, (*Lanius excubitor*.)

THE Shrikes, from the strong tooth-like process in their beak, have some resemblance to the Falcons; they have

received the name of Butcher Birds from the mode in which they dispose of their prey, by sticking it on a thorn before they commence tearing it to pieces.



THE SHRIKE, OR BUTCHER BIRD.

Mr. Bell, who travelled from Moscow, through Siberia, to Pekin, says that in Russia these birds are often kept tame in houses. He had one of them given to him, and taught it to perch on a sharpened stick fixed in the wall of his apartment; whenever a small bird was let loose in the room, the Shrike would immediately fly from his perch, and seize it by the throat in such a manner as to suffocate it in a moment. He would then carry it to his perch and spit it on the sharpened end, drawing it on carefully and forcibly with his bill and claws. If several birds were given him, he would use them all, one after another, in the same manner: leaving them hanging by the neck till he had leisure to devour them.

The American Shrike is about ten inches in length, and thirteen in the extent of its wings; it is found in all the northern parts of the new continent, and differs little from the European species. This bird is extremely partial to grasshoppers, and, following the habit already

mentioned, it fixes a number of these insects on the thorns belonging to the bush on which it sits. An unfounded belief exists, that the number of grasshoppers thus disposed of amounts to nine, and from this circumstance it has been called the Nine-killer.

To account for the practices of this bird, it is to be remembered that nature has given to it a strong, sharp, and powerful beak, a broad head, and great strength in the muscles of the neck, but its legs, feet, and claws, being by no means proportionably strong, are unequal to the task of grasping and tearing its food, like those of the Owl and Falcon tribe; it, therefore, wisely avails itself of the powers it possesses, both in strangling its prey, and in tearing it to pieces while feeding. "The character of the Butcher Bird," says Wilson, "is entitled to no common degree of respect. His activity is visible in all his motions, his courage and intrepidity are beyond those of every other bird of his size, and in affection for his young he is surpassed by none."

THE Tanager Tribe.

THE SCARLET TANAGER, (*Pyrrhuloxia rubra*. Swainson.)

THE Scarlet Tanager is common to North and South America, traversing both these vast continents as instinct directs, in search of food, or for the purpose of rearing its young. The splendid colour of this bird has occasioned it to be a great favourite, but as a songster it has not much claim to notice. The following instance of

affection for its young is related by Wilson, the American ornithologist:—

“Passing through an orchard one morning I caught one of these young birds that had but lately left the nest. I carried it with me about half a mile, to show it to my friend, Mr. W. Bartram, and having procured a cage, hung it up on one of the large pine-trees in the botanic garden, within a few feet of the nest of an orchard Oriole, which also contained young; hopeful that the charity or tenderness of the Orioles would induce them to supply the cravings of the stranger. But charity with them, as with too many of the human race, began and ended at home; the poor orphan was altogether neglected, notwithstanding its plaintive cries; and, as it refused to be fed by me, I was about to return it back to the place where I found it, when towards the afternoon a Scarlet Tanager, no doubt its own parent, was seen fluttering round the cage, endeavouring to get in. Finding this impracticable, he flew off, and soon returned with food in his bill, and continued to feed it till after sunset, taking up his lodgings on the higher branches of the same tree. In the morning, almost as soon as day broke, he was again seen actively engaged in the same affectionate manner; and, notwithstanding the insolence of the Orioles, continued his benevolent offices the whole day, roosting at night as before. On the third or fourth day, he appeared extremely solicitous for the liberation of his charge, using every expression of distressful anxiety, and every call and invitation that nature had put in his power, for him to come out. This was too much for the feelings of my venerable friend: he procured a ladder, and mounting to the spot where the bird was suspended, opened the cage, took out the

prisoner, and restored him to liberty and his parent, who, with notes of great exultation, accompanied his flight to the woods."

THE THRUSH TRIBE.

IN this tribe the notch in the beak, which was so visible in the Shrike, is less decided, and their character, as we might expect, is less sanguinary; their food being, in the animal kingdom, confined to worms and insects; but they live much more generally on berries than either.

Among the moderns, the different species of Thrushes are generally admired as song-birds, but in the time of the ancient Romans, they were reared for the purpose of food, and esteemed a very great dainty. Immense aviaries were constructed, each containing many thousand birds, and the greatest attention was paid to their food, for the purpose of fattening them for the table.

THE CAT BIRD, (*Orpheus felivox*. Swainson.)

AMONG the numerous species of Thrushes which are found in the American forests, the Cat Bird has been particularly noticed; it receives its name from its notes resembling, at times, the cry of a cat.

A celebrated author, speaking of this bird, says, "Few people in the country respect the Cat Bird; on the contrary, it is generally the object of dislike; and the boys of the United States entertain great prejudice and contempt for this bird, its nest, and young.

"I am at a loss to account for this cruel prejudice. Even those by whom it is entertained, can scarcely tell

why,—only they ‘hate Cat Birds!’ I think I have hit on some of the principal causes of this dislike, which seem to be some similarity of taste and clashing of interest, between the bird and the farmer. The Cat Bird is fond of large, ripe garden-strawberries; so is the farmer, for the good price they bring in the market. The Cat Bird loves the best and richest early cherries; so does the farmer, for they are sometimes the most profitable of his early fruit. The Cat Bird has a particular partiality for the finest ripe mellow pears; and these are also particular favourites of the farmer. But the Cat Bird has frequently the advantage of the farmer, by snatching off the first-fruits of these delicious productions; and the farmer takes revenge by shooting him down with his gun, as he finds old hats and scarecrows are no impediments in his way to the forbidden fruits, and nothing but this resource can restrain his visits. The boys are now set to watch the cherry-trees with guns; and thus commences a train of prejudices and antipathies, that commonly continue through life.”

THE MOCKING BIRD, (*Orpheus polyglottus*.
Swainson.)

THIS celebrated Bird is peculiar to the United States of America, where it is found in considerable numbers. Like the rest of its tribe, the Mocking Bird loses little of the power and energy of his song by confinement. In his domesticated state, when he commences his career of song, it is impossible to stand by uninterested. He whistles for the dog; Cæsar starts up, wags his tail, and runs to meet his master; he squeaks out like a hurt Chicken, and the Hen hurries about with hanging

wings and bristled feathers, clucking to protect her injured brood. The barking of the dog, the mewling of the cat, the creaking of a passing wheelbarrow, follow with great truth and rapidity. He repeats the tune taught him by his master, though of considerable length, fully and faithfully; he runs over the quiverings of the Canary, and the clear whistlings of the Virginia Nightingale, or Red Bird, with such superior execution and effect, that the mortified songsters feel their own inferiority, and become altogether silent, while he seems to triumph in their defeat by redoubling his exertions.



THE MOCKING BIRD.

This excessive fondness for variety, however, in the opinion of some, injures his own song. His elevated imitations of the Brown Thrush are frequently inter-

rupted by the crowing of Cocks; and the warblings of the Blue Bird, which he exquisitely manages, are mingled with the screaming of Swallows, or the cackling of Hens; amidst the simple melody of the Robin, we are suddenly surprised with the shrill reiterations of the Whip-poor-Will; while the notes of the Kill-deer, Blue Jay, Martin, and twenty others, succeed with such imposing reality, that we look round for the originals, and discover, with astonishment, that the sole performer in this singular concert is the admirable bird before us. During this exhibition of his powers, he spreads his wings, expands his tail, and throws himself around the cage in all the ecstasy of enthusiasm, seeming not only to sing, but to dance, keeping time to the measure of his own music. Both in his native and domesticated state, during the solemn stillness of night, as soon as the moon rises in silent majesty, he begins his delightful solo; and serenades us the live-long night; with a full display of his real powers, making the whole neighbourhood ring with his inimitable medley.

THE BLACKBIRD, (*Turdus merula*.)

When snow-drops die, and the green primrose-leaves
Announce the coming flower, the *Merle's* note
Mellifluous, rich, deep-toned, fills the vale,
And charms the ravished ear. The hawthorn-bush
New budded is his perch; there the gray dawn
He hails, and there with parting light concludes
His melody.—GRAHAME.

THIS bird is so well known, that it needs but little description: we are all acquainted with its beautiful mellow notes, which, although far from being so powerful as those of the Song-Thrush, are perhaps more pleasing.

THE ORIOLE TRIBE.

THE BALTIMORE ORIOLE,

(*Icterus Baltimore.* Dandin.)

Is an American bird of passage, and arrives in Pennsylvania, from the south, about the beginning of May leaving about the end of August or beginning of September; its principal colours are a glossy black and a brilliant orange; it is also famous as a song bird, its notes consisting of a clear mellow whistle, with a certain wild plaintiveness, extremely interesting. The nest of this bird is curiously attached to the end of the branches of an apple-tree, a weeping willow, and many others; on this account it has received the name of the Hanging-Bird.

High on yon poplar, clad in glossiest green,
 The orange black-capped Baltimore is seen,
 The broad extended boughs still please him best,
 Beneath their bending skirts he hangs his nest;
 There his sweet mate, secure from every harm,
 Broods o'er her spotted store, and wraps them warm;
 Lists to the noon-tide hum of busy bees,
 Her partner's mellow song, the brook, the breeze;
 These, day by day, the lonely hours deceive,
 From dewy morn to slow-descending eve.
 Two weeks elapsed, behold a helpless crew
 Claim all her care, and her affection too;
 On wings of love the assiduous nurses fly,
 Flowers, leaves, and boughs, abundant food supply:
 Glad chants their guardian, as abroad he goes,
 And waving breezes rock them to repose.

THE WARBLER TRIBE.

THE REDSTART, (*Phœnicura ruticilla*. Swainson.)

THE Redstart is a migratory bird, and arrives in England about the beginning of April, and leaves us about the latter end of September. It frequents old walls and ruins, and is distinguished by a peculiar quick shake of



THE REDSTART.

the tail when it alights on a wall or other place. Its food consists of flies, spiders, the eggs of ants, and soft fruits.

THE NIGHTINGALE, (*Sylvia luscinia*.)

THE Nightingale holds the same rank in Europe, as a bird of song, as the Mocking Bird does in America ; it is a migratory bird ; appears in England about the middle of April, and leaves towards the latter end of September, during which time it rears two broods of young ; sometimes, but very rarely, it has been known to hatch as many as three broods. It possesses more variety, harmony, and compass in its voice, than any other bird ; sixteen different burdens may be reckoned in its song, well determined by the first and last notes ;

it can sustain this song uninterruptedly for the space of twenty seconds, and the sphere which its voice can fill is at least a mile in diameter. Song is so peculiarly the attribute of this bird, that even the female possesses it. In calm weather, in the fine nights of Spring, when its voice is heard alone, undisturbed by any other sound, nothing can be more delightful ; it then pours forth, in their utmost beauty, all the resources of its incomparable organ of voice.

THE GOLDEN-CRESTED WREN,

(*Regulus auricapillus.*)

THIS pretty little songster is a native of every part of Europe, and much more common than it is in general believed to be. Its figure being so extremely small, the whole weight of its body not exceeding three drachms, causes it to be discovered with difficulty among the foliage. It is a very hardy bird, and may be heard warbling its cheerful song during a fall of snow, with perfect unconcern. The number of eggs the female lays is sometimes as many as eighteen. The Wren constructs its nest in a very curious manner. Unlike other birds, it does not begin first at the bottom. If the nest be placed against a bank, it begins the fabric at the top ; if against a tree, it traces the outline on the bark, and closes the side and top in succession. Whatever the colour of the surrounding objects may be, it always contrives to imitate it in the outward covering of its nest.

THE PIED WAGTAIL, (*Motacilla alba.*)

THE Wagtail is a lively little bird, and extremely common in most parts of England, frequenting the margin

of shallow brooks and ponds. It is a peculiarly clean bird in its nest, removing even pieces of paper, or straw,



THE PIED WAGTAIL.

or any other substances that interfere with its notions of neatness.

OF BIRDS WITH WIDELY-OPENING BEAKS, (Family, *Fissirostri.*)

THE SWALLOW TRIBE.

THE birds belonging to this tribe take their name from the gape of the beak extending far back, so as to allow of the mouth being widely opened. They take their prey upon the wing, and this apparently disproportionate gape gives them a better chance of catching insects during their airy evolutions. There are four species of the Swallow tribe known in England, the House Martin, (*Hirundo urbica*,) whose well-known nest is found under the eaves of houses, and in the angles of windows; the Chimney Swallow, (*Hirundo rustica*,) that builds in old chimneys, barns, and haystacks; the Sand Martin,

(*Hirundo riparia*,) frequenting holes in sand-banks ; and the largest of the tribe, the Swift, or great Black Swallow, (*Cypselus murarius*.) They are all migratory birds, and the four species mentioned above arrive in England in the following order : the House Martin at the beginning of April ; this is followed by the Chimney Swallow and Sand Martin, about the middle of the same month ; but it is near the end of April before the Swift makes its appearance.



THE HOUSE MARTIN.

The sudden appearance of these birds in the Spring of the year, gave rise to many ridiculous stories as to the places to which they had retreated during the Winter : some maintained that they hid themselves in crevices of rocks, and remained dormant during the cold weather ;

others asserted, on what was presumed to be good authority, that the peasants in the North of Europe were in the habit of drawing up numbers of these birds from the bottom of pools and lakes; and consequently, that it was to these places that they retired. More recent observations have overturned all these fanciful theories; and it is ascertained that the Swallows, at the approach of Winter, move southward to some more genial climate, where the insects on which they feed are to be found in abundance. Those species which hatch their young in warmer climates, where their insect food is to be found at all seasons of the year, never migrate, but remain in the same country the year through.

They are what is called soft-billed birds, the nature of their food not requiring any great strength in that organ; their feet and legs also are weak and small, but the great exertions they have to make in hunting their prey require great strength of wing, and we find, therefore, the Swallows and Swifts the most rapid in their flight of any of the birds, with the exception of the Hawks. The Swallow, the House Martin in particular, is a most skilful builder: the manner in which he performs this task is well described by the Rev. Mr. White, in his *Natural History of Selborne*.

“About the middle of May, if the weather be fine, the Martin begins to think in earnest of providing a mansion for its family. The crust, or shell of this nest, seems to be formed of such dirt or loam as comes readily to hand, and is tempered and wrought together with little bits of broken straws, to render it tough and tenacious. As this bird often builds against a perpendicular wall, without any projecting ledge under, it requires its utmost efforts to get the first foundation

firmly fixed, so that it may safely carry the superstructure. On this occasion, the bird not only clings with its claws, but partly supports itself by strongly inclining its tail against the wall, making that a fulcrum; and thus steadied, it works and plasters the materials into the face of the brick or stone. But then, that this work may not, while it is soft and green, pull itself down by its own weight, the provident architect has prudence and forbearance enough not to advance her work too fast; but, by building only in the morning, and by dedicating the rest of the day to food and amusement, gives it sufficient time to dry and harden: about half an inch seems to be a sufficient layer for a day. Thus careful workmen, when they build mud walls, (informed at first, perhaps, by this little bird,) raise but a moderate layer at a time, and then desist, lest the work should become top-heavy, and so be ruined by its own weight. By this method, in about ten or twelve days, is formed a hemispheric nest, with a small aperture towards the top, strong, compact, and warm, and perfectly fitted for all the purposes for which it was intended.

“The shell, or crust of the nest, is a sort of rustic work, full of knobs and protuberances on the outside; nor is the inside of those I have examined smoothed with any exactness at all, but is rendered soft and warm, and fit for incubation, by a lining of small straws, grasses, and feathers; and sometimes by a bedding of moss interwoven with wool. They are often capricious in fixing on a nesting-place, beginning many edifices, and leaving them unfinished; but when once a nest is completed in a sheltered place, after so much labour is bestowed in erecting a mansion, as Nature seldom works in vain, the same nest serves for several seasons. Those

which breed in a ready-finished house get the start in hatching of those that build anew, by ten days or a fortnight. These industrious artificers are at their labours, in the long days, before four in the morning. When they fix their materials they plaster them on with their chins, moving their heads with a quick vibratory motion."

Speaking of these birds, the late Sir Humphry Davy observes, "The Swallow is one of my favourite birds, and a rival of the Nightingale; for he glads my sense of seeing as much as the other does my sense of hearing. He is the joyous prophet of the year, the harbinger of the best season; he lives a life of enjoyment amongst the loveliest forms in nature. Winter is unknown to him, and he leaves the green meadows of England in Autumn, for the myrtle and orange groves of Italy, and for the palms of Africa."

THE FERN OWL, (*Caprimulgus Europæus*. Linn.)

THE Fern Owl belongs to the same family as the Swallow, and is far from being uncommon in this country. It is larger than the last-mentioned birds, but, like them, its principal food consists of insects. The powers of its wing are wonderful, exceeding, if possible, the various evolutions and quick turns of the Swallows. It is supposed to take part of its prey with its foot, for which purpose one of its toes is curiously notched like a saw.

The sides of the mandibles in the Fern Owl are furnished with a number of stiff hairs, with the points inclining outwards. The intention of this contrivance is to secure singly, as it were in a trap, the insects as they are taken, without the necessity on the part of the bird, of swallowing its prey too frequently, thus saving useless

labour, and allowing it to take a greater quantity of food in a shorter space of time. As it exceeds the Swallow considerably in size, it of course feeds on a larger kind of insects, such as Cockchafers and other Beetles. These insects, during the heat of the day, fly to a great height, and are much more scattered, and therefore less easily taken in any quantity; but in the morning and evening, when leaving and returning to their earthy burrows, they



THE FERN OWL.

are found in great abundance in a small space. On this account, the motions of these birds can only be watched for two hours out of the twenty-four, that is, an hour after sunset, and an hour before sunrise; in this respect they agree with the Owls. They have had the name of

Goatsucker applied to them; a most absurd notion being prevalent of their sucking the milk of Goats. This idea seems to have arisen from their habit of hovering about these creatures when in search of insects.

OF BIRDS WITH STRONG CONICAL BILLS, (Family, *Conirostri.*)

ALL this family of the Passeres feed upon different kinds of seeds, and to enable them to bruise the harder sorts, they have been furnished with strong bills, not long and hooked, for the purpose of tearing, like those of birds of prey, but short and strong at the base, and admirably adapted for crushing.

THE LARK TRIBE.

THE SKYLARK, (*Alauda arvensis.*)

THERE is, perhaps, no song-bird with which we are so well acquainted as the Lark; unlike most of the feathered creation, it practises its song in the open country, and



THE SKYLARK.

soaring upwards, beyond the reach of our sight, pours forth its delightful music at the earliest dawn.

. Up springs the Lark,
 Shrill-voiced and clear, the messenger of morn;
 Ere yet the shadows fly, he mounted sings
 Amidst the dawning clouds, and from their haunts
 Calls up the tuneful nations.

The voice of the Lark is extremely powerful, and may be heard at a great distance; it is the only bird that sings while on the wing. A peculiar character in the Larks is the great length of the claw on the hinder toe. The use of this lengthened claw has been the occasion of much discussion. A recent author supposes it to be used by the bird for the purpose of shifting its eggs from place to place, when disturbed, and even asserts that the little creature has been seen in the act of performing this feat.

THE FINCH TRIBE.

THE CANARY BIRD, (*Fringilla canaria.*)

THE Canary Bird, although so well known in England, is not a native of this country. It was originally brought from the Canary Islands, where it exists in numerous flocks. This bird, when in captivity, is extremely tame and tractable, and this property has frequently been taken advantage of, and many curious tricks have been taught to various individuals. A Frenchman exhibited in London twenty-four Canary Birds; some of these balanced themselves on their shoulders, with the head downwards, having their legs and tail in the air. One of them, taking a slender stick in its claws, passed its

head between its legs, and suffered itself to be turned round, as if in the act of being roasted. Another balanced itself, and was swung backward and forward on a kind of slack rope. A third was dressed in military uniform, having a cap on its head, with a sword and pouch, and carrying a firelock in one claw; after some time sitting upright, this bird, at the word of command, freed itself from its dress and flew away to its cage. A fourth suffered itself to be shot at, and, falling down as if dead, was put into a little wheelbarrow and wheeled away by one of its comrades; and several were placed upon a little firework, and continued there quietly until it was discharged. The beautiful golden colour of the Canary is the effect of domestication; in a wild state its feathers are of a dirty green colour.

THE GROSBEAK TRIBE.

THE BULFINCH, (*Pyrrhula vulgaris*.)

THE song of the Bulfinch, in a state of nature, is very simple, and far from musical, but it is capable, when domesticated, of learning, in great perfection, almost any



THE BULFINCH.

tune that may be whistled to it. So famous is it for this faculty, that men have made it their business to teach numbers of these birds, and afterwards sell their "piping Bulfinches" at high prices. When tamed, it shows considerable affection for its master, will perch upon his shoulder when called, and become so familiar, as to take food out of his mouth.

THE CROSSBILL, (*Loxia recurvirostra*.)

THIS singular bird is frequently met with in many parts of Europe, but is rather rare in England; at times, however, it is seen in flocks of twenty or thirty, which,

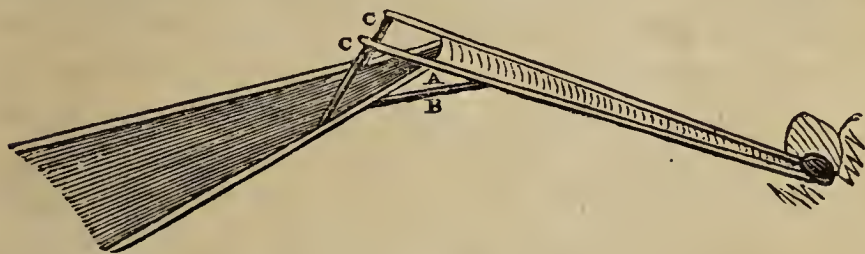


THE CROSSBILL.

if they make their appearance in an orchard, commit the greatest havoc, splitting the apples and pears to pieces for the purpose of getting at the pips.

The chief food of the Crossbill consists of the seeds of the different kinds of firs; to enable it to reach this food it has been provided with a most curiously constructed bill and tongue.

The manner in which the bills of these birds are crossed, was considered, when it was first noticed, to be merely an accidental distortion, but, on more careful examination, it proved to be a most beautiful provision of the Almighty to assist its possessor in obtaining its food. Seated on a branch of fir, the Crossbill inserts its curious bill in the space between the scales of the cone, at the bottom of which it expects to find the seed it is in search of. The muscles that move this bill are extremely strong, and act upon its two portions laterally, that is, *sideways*, and by this means separate the scale from the side of the cone, and expose the seed. But the most curious contrivance is the tongue of this little creature; the construction of this will be better understood by the annexed diagram, which is a magnified view of that organ.



THE TONGUE OF THE CROSSBILL.

Instead of being in one piece from the root to the point, it is, as it were, hinged in the centre at A. The bird having forced back the scale by means of its bill, inserts the point of its tongue, which is formed something like an apple-scoop, beneath the seed, the two small muscles, B, assisting it in this manœuvre; having performed this part of the operation, it suddenly jerks it

into its mouth by the contraction of two stronger muscles, c c. The construction of its head also is so managed as to allow it to see the place where the seed is fixed during the whole time.

The Crossbill has sometimes been kept in captivity, but it is a most troublesome and mischievous prisoner; wrenching apart the wires of its cage, and tearing to pieces the wood-work. The destruction of chip boxes seemed to afford one of these restless captives great amusement; it would peck a hole in their side, and rip them to pieces in a moment. The shells of nuts, walnuts, and almonds, were all broken in the same manner.

THE PIE TRIBE,

CONSISTS of Crows, Ravens, Jackdaws, Magpies, Rollers, Birds of Paradise, &c. The instinct of the whole of these birds of whose habits we know any thing, induces them to hoard up and hide whatever may come into their possession. This thievish disposition is not confined to nuts and seeds, or such substances as the bird can consume, but applies even more directly to any bright object, particularly money and pieces of metal. Spoons, knives, forks, &c., are often carried away by these mischievous creatures, and much confusion has frequently been the result of their depredations.

THE MAGPIE, (*Pica melanoleuca*.)

THE Magpie is found in most of the temperate climates of the earth, both in America and in the Old World: its form is exceedingly graceful, and the colours of its

plumage, particularly the feathers of the tail, are extremely resplendent, reflecting in the sunshine the most brilliant metallic tints.



THE MAGPIE.

The nest of the Magpie is usually placed in a conspicuous situation, but at the same time in one very difficult of access, as, for instance, the top of some very lofty tree. It is chiefly formed of branches of hawthorn, with the thorns sticking outwards, and lined with fibrous roots and wool, the whole neatly plastered with clay; and, to defend it from birds of prey, a kind of awning is constructed over it, formed of the sharpest thorns, strongly woven together, leaving only an opening sufficiently large for its owner to creep in and out.

THE LESSER KING BIRD OF PARADISE, (*Paradisea regia*.)

THERE are about eight or nine species of the Birds of Paradise, which are all found in the islands of the Indian Ocean. Their skins, when deprived of the legs, are used by the natives as ornaments for the head, and sold to Europeans for the same purpose. They have acquired the name of Birds of Paradise from the ridiculous notion of their inhabiting some earthly paradise, constantly hovering in the air; and, on that account, being without feet or legs. This mistake arose from their having been formerly always brought into the market in a mutilated state. The native merchants,



THE LESSER KING BIRD OF PARADISE.

finding, now, that the skins are preferred in a perfect condition, supply them to us without depriving them of what they consider useless and ugly appendages.

The Bird of Paradise has, we believe, never been seen

alive in this country, except on one occasion. In this case the individual was presented to one of the Princesses, and lived under her care for about three months.

OF PASSERINE BIRDS WITH SLENDER BILLS. (Family, *Tenuirostri.*)

THE birds with slender bills form the last family of the Passeres, and the whole of them possess a long and slender bill, without a notch or tooth on its edges; in some cases, this bill is straight; in others it is more or less arched. Among those with straight bills, we find

THE NUTHATCH TRIBE.

THE NUTHATCH, (*Sitta Europæa.*)

THE Nuthatches have a straight, pointed bill, flattened near the end, which they employ, like the Woodpeckers, to perforate the bark of trees, to obtain the insects that are hidden under it; but their tongue cannot be extended like that of the Woodpecker.

We extract the following lively description of this little bird from Loudon's *Magazine of Natural History*:

"I was expecting the transit of some Wood-pigeons under a birch-tree, with my gun in my hand; I observed a little ash-coloured bird squat himself on one of the large lateral trunks over my head, and, after some observation, begin to tap loudly, or rather solidly, upon the wood, and then proceed round and round the branch, it being clearly the same thing to him whether his head or heels were uppermost. I shot,

and the bird fell: there was a lofty hedge between us, and when I got over, he had removed himself. I was some time before I secured him; and I mention this, because the manner in which he eluded me was characteristic of his cunning. He concealed himself in holes at the bottom of a ditch, so long as he heard the noise of motion; and, when all was still, he would scud out and attempt to escape. A wing was broken, and I at length got hold of him. He proved small, but very fierce; and his bite would have made a child cry out. The elbow-joint of his wing being thoroughly shattered, and finding that he had no other wound, I cut off the dangling limb, and put him into a large cage with a common Lark. The wound did not in the least diminish his activity, nor yet his pugnacity, for he instantly began to investigate all means of escape; he tried the bars, then tapped the wood-work of the cage, and produced a knocking sound, which made the room re-echo; but, after finding his efforts vain, he then turned upon the Lark, ran under him with his gaping beak to bite, and effectually alarmed his far more gentle and elegant antagonist.

“Compelled to separate them, the Nuthatch, for this bird I discovered him to be, by turning over the leaves of an Ornithologia, was put into a smaller cage of plain oak-wood and wire. Here he remained all night; and the next morning his knocking or tapping with his beak was the first sound I heard, though sleeping in an apartment divided from the other by a landing-place. He had food given to him, minced chicken, and bread-crumbs, and water. He ate and drank with the most perfect impudence; and the moment he had satisfied himself, turned again to his work of battering the frame of his cage, the sound from which, both in loudness and

prolongation of noise, is only to be compared to the efforts of a fashionable footman, upon a fashionable door, in a fashionable square.

“He had a particular fancy for the extremities of the corner pillars of the cage; on these he spent his most elaborated taps; and at this moment, though he only occupied the cage a day, the wood is pierced and worn like a piece of old worm-eaten timber. He probably had an idea that if the main beams could once be penetrated, the rest of the superstructure would fall and free him. Against the doorway he had also a particular spite, and once succeeded in opening it; and when, to interpose a further obstacle, it was tied in a double knot, with a string, the perpetual application of his beak quickly unloosed it. In ordinary cages a circular hole is left in the wire for the bird to insert his head to drink from a glass: to this hole the Nuthatch constantly repaired, not for the purpose of drinking, but to try to push out more than his head, but in vain, for he is a thick bird, and rather heavily built; but the instant he found the hole too small, he would withdraw his head, and began to dig and hammer at the circle, where it is rooted in the wood, with his pick-axe of a beak, evidently with a design to enlarge the orifice. His labour was incessant, and he ate as largely as he worked; and I fear it was the united efforts of both that killed him. His hammering was peculiarly laborious, for he did not peck as other birds do, but grasping his hold with his immense feet, he turned upon them as upon a pivot, and struck with the whole weight of his body; thus assuming the appearance, with his entire form, of the head of a hammer, or as I have sometimes seen birds in mechanical clocks made to strike the hour, by swinging

on a wheel. We were in hopes that when the sun went down he would cease his labours, and rest; but no; at the interval of every ten minutes, up to nine or ten in the night, he resumed his knocking, and strongly reminded us of the coffin-maker's nightly and dreary occupation. It was said by one of us, 'He is nailing his own coffin;' and so it proved. An awful fluttering in the cage, now covered with the handkerchief, announced that something was wrong; and we found him at the bottom of his prison, with his feathers ruffled and nearly all turned back. He was taken out, and for some time he lingered away in convulsions, and occasional brightenings up. But, at length, he drew his last gasp!"

THE HOOPOE TRIBE.

THE HOOPOE, (*Upupa epops.*)

THIS graceful bird is distinguished by a beautiful crest, about two inches high, of a pale orange colour, tipped with black, which it can erect at pleasure. Its chief



THE HOOPOE.

food consists of insects, and it is found over the greatest portion of the Old Continent; in England it is seldom seen. The habits of the Hoopoe are solitary, and it is very rarely met with in company with any of its own race.

THE SMALLEST HUMMING BIRD,

(*Trochilus minor.*)

THE Humming Birds are the smallest of all the feathered tribes; in their movements they are the most rapid; in proportion to their size, the strongest; and in brilliancy of colour, they far exceed all the rest of their class. To describe their plumage, by saying that it is composed of feathers of the most brilliant hues, would give but a faint idea of the reality; the brightest metallic lustre, the most resplendent gems, are hardly equal to the glossy covering of this tiny race. The Smallest Humming Bird, when first excluded from the egg, is hardly larger than a blue-bottle fly; and when full grown scarcely exceeds in size a humble bee. Humming Birds are found in great variety in the West Indies, and the warmer latitudes of America. The food of these little creatures consists of the nectar which they extract from flowers with their small divided tongues, and of some of the minuter kind of insects.

The celebrated ornithologist, Audubon, says of this tribe:—"If comparison might enable you to form some tolerably accurate idea of their peculiar mode of flight, and their appearance when on wing, I would say that, were both objects of the same colour, a large sphinx or moth, when moving from one flower to another, and in a direct line, comes nearer the Humming Bird, in aspect, than any other object with which I am acquainted.

"Having heard several persons remark that these

little creatures had been procured with less injury to their plumage by shooting them with water, I was tempted to try the experiment, having been in the habit of killing them either with remarkably small shot, or with sand. Finding, however, that, even when within a few paces, I seldom brought one to the ground, when I used water instead of shot, and moreover was obliged to clean my gun after every discharge, I abandoned the scheme, and feel confident that it never can have been used with material advantage. I have frequently secured some by employing an insect-net; and were this machine used with dexterity, it would afford the best means of procuring Humming Birds."



SMALLEST HUMMING BIRDS AND NEST.

The nests of some species of the Humming Birds are very curiously constructed; they are suspended in the air, at the point of the twigs of an orange, a pomegranate, or a citron tree; sometimes even in houses, if they find a small and convenient twig for the purpose. The female is the architect, while the male goes in quest of materials, such as cotton, fine moss, and the fibres of vegetables. The nest is about the size of a Hen's egg cut in two. They lay two eggs at a time, and never more, about the size of small peas, and as white as snow, with here and there a yellow speck. The nest of the Smallest Humming Bird, shown in the engraving, it will be seen, is not constructed in this manner.



THE HUMMING BIRD.

PASSERINE BIRDS, WITH UNITED TOES.

(Family, *Syndactyli*.)

THE birds which belong to this group are distinguished by having the outer toe united to the middle one by a thin membrane, for nearly the whole of its length. In other respects they differ, perhaps, as much from each other, as any birds in the whole class.

THE BEE-EATER, (*Merops apiaster*,)

BELONGS to this group, and is found in the warmer parts of Europe: several species of the same bird are also met with in the East Indies.

The creature, as its name implies, feeds upon Bees; and a very ingenious mode of taking it is said to be employed in the Mediterranean: this plan consists in fastening a Bee on a hook, tied to the end of a fine thread, and in this manner, as it were, angling for the bird. At times the European species is found in great flocks in Germany and in the neighbouring countries.

THE KINGFISHER, (*Alcedo ispida*.)

THIS bird (the Halcyon of the ancients) has been the cause of many a fabulous tale; it was said to build its



THE KINGFISHER.

nest upon the waters, and, floating gently on their surface, to still the troubled waves wherever it moved. Its name even yet preserves part of its original meaning, in the phrase *Halcyon days*, when speaking of happy times.

The bill of the Kingfisher is large and powerful, but its legs and feet are extremely short and weak ; its prey consists chiefly of fish, and it will sit for hours together, patiently perched on the branch of some tree overhanging the waters, watching for the passing by of some of its finny inhabitants ; it is extremely strong on the wing, and darts through the air with the rapidity of a shot, while its brilliant feathers glitter like polished metal as the creature dashes through the sun-beams ; when it has secured a fish, it proceeds with it to the bank, and beats its head against a stone until it has killed it, which it always does before devouring it.

OF CLIMBING BIRDS.—(Order, SCANSORES.)

THE feet of all the birds in this order have the outward toe directed backwards, like a thumb, so as to allow the creature to grasp any object as if with a hand ; this arrangement assists it materially in climbing and holding fast to the branches of trees.

THE WOODPECKER TRIBE.

THE different species of the Woodpecker genus are extremely numerous ; they are scattered over the whole world, excepting New Holland, and perform a most useful part in the scale of nature.

Woodpeckers feed on insects, which they search for with indefatigable perseverance beneath the bark, and in the crevices, of old trees ; in this manner putting a stop to the further depredations of those destructive little creatures. They have been falsely accused of

damaging plantations by stripping off the bark from the young trees; but the Woodpecker never attacks a healthy tree; it would not answer its purpose to waste its time and strength in boring a hole in the sound wood; it is only the tree in which the destructive grub has made a lodgement, that is selected by this feathered carpenter.

It is curious to notice the ingenuity of this bird in procuring its food; if it finds a crevice in which it suspects an insect may lurk, it strikes forcibly on the wood with its beak, applying its ear to the opening to listen to the movements of the frightened prisoner; it then devotes itself to the task of cutting away the wood, to enlarge the opening sufficiently to allow it to reach its prey.

These being the habits and mode of life of the Woodpecker, we are led to expect a peculiar organization of the bird itself, to allow it to perform its task; and surely nothing can be more curious, or better adapted for the purpose, than the weapons with which it is furnished. Its feet, which are armed with strong claws, are well fitted for clinging to the side of a tree, and, in addition to this, the feathers of the tail, which are extremely short, are also as stiff as whalebone, and form an additional support; its beak is very hard and strong, and flattened like a chisel, and so efficient is it, that a large Woodpecker can rip off the bark from an old tree, to the extent of six or seven feet, in a very short time; but although this beak is an excellent instrument for the purpose of reaching its prey, it is ill adapted for securing it; in order, therefore, that its labour may not be thrown away, it possesses a most wonderfully constructed tongue.

The tongue of a Woodpecker may be compared to a camel-hair pencil, and is used much in the same manner. In a hollow in the front of the lower mandible of the beak a kind of glutinous liquid is found, supplied by the glands that in us produce the *saliva*, or spittle; into this it dips the end of the tongue, which is provided with hair, and thrusting it into the hole in which the insect is concealed, withdraws it with the creature adhering to it. In doing this, the motion is so rapid, that the eye can scarcely follow it. The bird has a very great command over this organ, and is able to thrust it out to a great extent, and to withdraw it again into a sheath, by means of a most curious pair of muscles, which, as if to give them greater purchase, are absolutely wound round the wind-pipe.

THE GREEN WOODPECKER, (*Picus viridis*.)

Is the best known English bird of the tribe; its nest is usually built in a hole in a decayed tree, and the



THE GREEN WOODPECKER.

male and female sit upon the eggs by turns; it is a solitary and shy bird, and not easily approached; when near enough to notice it, it is curious to observe the

rapidity with which it dodges round the trunk of the tree on which it is seen, and its colour, so nearly resembling that of the bark, would almost prevent its being discovered, were it not for the loud tapping of its powerful bill.

THE GREAT BLACK WOODPECKER,

(*Picus martius*.)

Is the largest European species of this tribe. It is rather common on the Continent, particularly in Germany, Switzerland, Sweden, and Russia, but in England it is considered rare. The male and female may be easily



THE GREAT BLACK WOODPECKER.

distinguished by the red feathers on the crown of the head ; in the male, this brilliant crest extends over the whole of the upper part of the head, but in the female it is confined to the hinder part.

THE WRYNECK, (*Yunx torquilla*.)

THE Wryneck derives its name from a peculiar habit of lengthening its neck, which it at the same time writhes from side to side with serpent-like bendings ;



THE WRYNECK.

now pressing down the feathers so as to resemble the head of a snake, and again half closing the eyes, swelling out the throat, and erecting its crest, presenting an appearance at once singular and ludicrous. Amongst the migratory birds, the Wryneck is one of our earliest

visitors, making its appearance at the beginning of April, generally a few days before the Cuckoo, and from this circumstance it is called the *Cuckoo's mate*. In manners, the Wryneck is shy and lonesome; and, were it not for its loud and well-known call, we should not often be aware of its presence: its quiet habits leading it to close retirement, and its sober colour, which agrees with the brown bark of the trees, tending also to its concealment.

The tongue of the Wryneck can be protruded in the same manner as that of the Woodpecker, and is employed for the same purpose, but the bill of this bird is not sufficiently strong to be employed in chiselling wood, or ripping bark; it therefore contents itself with such insects as it meets with; of ants it is particularly fond, and obtains them in considerable numbers, by thrusting its tongue into their nests.

THE CUCKOO TRIBE.

THE CUCKOO, (*Cuculus canoris*.)

THIS is the only species of Cuckoo which frequents the European continent: it is a Spring visiter, and makes its appearance here in the beginning of April, delighting us, as the harbinger of Summer, with the repetition of its simple and well-known note. The behaviour of the Cuckoo, as far as regards its mode of rearing its young, discloses one of the most astonishing, and almost incredible facts, with which the whole history of animated nature makes us acquainted. The devoted fondness for their young which birds in general evince, appears to be a feeling to which the Cuckoo is a stranger; it does not even build a nest for the purpose of depositing and

hatching its eggs, but, in general, selects that of the Hedge Sparrow. We are quite unable even to guess at the cause of this curious proceeding, but there is no reason to doubt that it fulfils some wise purpose.



THE CUCKOO.

The Cuckoo is a much larger bird than the Hedge Sparrow, and we should be naturally led to expect that its eggs also would be larger, but, as if to provide against the emergency, the egg of the Cuckoo is unusually small.

As soon as it leaves the egg, the young bird sets to work to rid itself of the young Sparrows, if they are hatched, if not, of the eggs, by throwing them over the side of the nest; to enable it to effect this, it has a singular hollow on its back, in which it balances the egg or bird, and, shuffling up the side of the nest, tilts it over. This, however, is sometimes only effected after many attempts, especially if the young Sparrows have

been hatched two or three days before the Cuckoo. This instinct of destruction may be accounted for, from the fact of the young Cuckoo having so voracious an appetite, that if the other inmates of the nest were not got rid of, the female Sparrow would not be able to obtain sufficient food for the young family.

THE TOUCAN TRIBE.

THIS curious race of birds is confined to the continent of South America, where they are found in great variety.



THE TOUCAN.

The feathers with which they are adorned are of the most beautiful jet-black, intermingled with patches of bright-orange and scarlet; round the eye there is a space of naked skin, generally of a clear sky-blue colour. But the most curious part of their formation is an enormous bill, which is formed of a thin semi-transparent substance, like horn, the cavity being filled with a kind of spongy net-work.

The Toucan, when at roost, assumes a very odd appearance, with the head tucked under its wing, and the tail turned forwards, so as to lie almost flat on its back.

The food of the Toucan consists chiefly of fruits of various kinds, but, at times, it is said to feed on young birds, and other small animals. It is easily tamed, and will become very familiar, eating almost anything offered to it; but it seems to prefer fruits; of grapes it is particularly fond, and will catch them with its bill with great dexterity, if they are thrown to it singly.

THE PARROT TRIBE.

THIS tribe of birds may be popularly divided into *Macaws*, (large Parrots, with long wedge-shaped tails and naked faces;) *Parakeets*, (small Parrots;) *Cockatoos*, (with short tails and moveable crest;) *Parrots*, (with short tails and wanting a crest;) and *Lories*. The power of imitating the human voice possessed by these birds is very extraordinary, and many a wonderful tale has been told of their sagacity; indeed, so deeply rooted and so widely spread is the idea, that a Parrot knows the meaning of what it says, that any one contradicting this popular belief is set down as incredulous, especially

as these tales have been told on what is considered the best authority.

This faculty of imitation it possesses in a far greater perfection than any other bird. Its voice, also, is more like that of a man than any other; the Raven is too hoarse, and the Jay and Magpie too shrill, to resemble the truth; but the Parrot's note is of the true pitch, and capable of a variety of modulations. For this it is indebted to the form of its bill, tongue, and head. "Its bill, round on the outside and hollow within, has in



THE COCKATOO.

some degree the capacity of a mouth, and allows the tongue to play freely; and the sound, striking against the circular border of the lower mandible, is there modified, as on a row of teeth; while the concavity of the upper mandible reflects it like a palate: hence the

animal does not utter a whistling sound, but a full articulation. The tongue, which modulates all sounds, is proportionably larger than in man, and might make the bird more voluble, were it not harder than flesh, and -invested with a kind of horny tip."

Parrots are found in all the warmer parts of the world; they appear in immense flocks, and commit great havoc in the fields of maize, or Indian corn.

A story is told by Willoughby, of a Parrot belonging to King Henry the Seventh. This monarch was residing at Westminster, in his palace by the river Thames, and the bird had learned to talk many words from the passengers who happened to take water. One day, sporting on his perch, the poor bird fell into the river, at the same time crying out as loud as he could, "A boat! twenty pounds for a boat!" A waterman, who happened to be near, hearing the cry, made to the place where the Parrot was floating, and, taking it up, restored it to the king. As it seems the bird was a favourite, the man insisted that he ought to have a reward, rather equal to his service than his trouble, and as the Parrot cried out twenty pounds, he said the king was bound in honour to grant it. The king at last agreed to leave it to the Parrot's own determination, which the bird hearing, cried out, "Give the rogue a groat."



THE PARAKEET.

BIRDS THAT RESEMBLE THE COMMON FOWL.—(Order, GALLINÆ.)

THE birds of this order are in general noted for their dull and heavy flight. They pass the greatest part of their time on the ground, and generally select some branch of a tree near the earth as a roosting-place. With very few exceptions, they are able to feed themselves immediately after leaving the egg, requiring only the protection of the mother. Among them are to be found those which are of most service to mankind, affording a constant supply of wholesome and delicious food. They may be compared, to a certain extent, to the ruminating animals among quadrupeds, and, like them, their digestive apparatus is more complex than in most other tribes.

THE PEACOCK, (*Pavo cristatus*.)

THE Peacock, like most of our domestic fowls, was originally brought from Asia: it is one of the most beautiful of all the feathered tribes, and has the power of displaying the splendid colours with which it is adorned to the best advantage. In the time of Francis the First of Germany, it was the custom to serve up Peacocks, not with an intention of their being eaten, but only seen. Their manner was to strip off the skin, and then preparing the body with the warmest spices, they covered it up again in its former skin, with all its plumage in full display, and no way injured by the preparation. The bird, thus prepared, was often preserved for many years without corrupting. To give a higher zest to those entertainments, particularly on the occasion of a wedding, they filled the bird's beak and throat with

cotton and camphor, which was set on fire to amuse the company. Peacocks were highly esteemed by the Romans, and they are mentioned in Holy Writ among Solomon's importations from the East.



THE PEACOCK.

THE WILD TURKEY, (*Meleagris gallopavo*.)

THE great size and beauty of the Wild Turkey, its value as a delicate and highly-prized article of food, and the circumstance of its being the origin of the

domestic race now generally dispersed over both continents, render it one of the most interesting birds indigenous to the United States of America.

About the beginning of October, when scarcely any of the seeds and fruits have yet fallen from the trees, these birds assemble in flocks, and gradually move towards the rich bottom lands of the Ohio and Mississippi. The males, or, as they are more commonly called, the gobblers, associate in parties of from ten to a hundred, and search for food apart from the females; while the latter are seen either advancing singly, each with its brood of young, then about two-thirds grown, or in connexion with other families, forming parties often amounting to seventy or eighty individuals, all intent on shunning the old cocks, which, even when the young birds have attained this size, will fight with, and often destroy them by repeated blows on the head. Old and young, however, all move in the same direction, and on foot, unless their progress be interrupted by a river, or the hunter's dogs force them to take wing. When they come upon a river they betake themselves to the highest eminences, and there often remain a whole day, or sometimes two, as if for the purpose of consultation. During this time the males are heard gobbling, calling, and making much ado, and are seen strutting about, as if to raise their courage to a pitch befitting the emergency. Even the females, and the young, assume something of the same pompous demeanour, spread out their tails, and run round each other, *purring* loudly, and performing extravagant leaps. At length, when the weather appears settled, and all around is quiet, the whole party mounts to the tops of the highest trees, whence, at a signal, consisting of a

single *cluck* given by a leader, the flock takes flight for the opposite shore. The old and fat birds easily get over, even should the river be a mile in breadth; but the younger and less robust frequently fall into the water; not to be drowned, however, as might be imagined. They bring their wings close to their body, spread out their tail as a support, stretch forward their neck, and striking out their legs with great vigour, proceed rapidly towards the shore; on approaching which, should they find it too steep for landing, they cease their exertions for a few moments, float down the stream until they come to an accessible part, and by a violent effort generally extricate themselves from the water. It is remarkable, that, immediately after thus crossing a large stream, they ramble about for some time, as if bewildered. In this state they fall an easy prey to the hunter.

When the Turkeys arrive in parts where the mast* is abundant, they separate into smaller flocks, composed of birds of all ages and both sexes, promiscuously mingled, and devour all before them.

This happens about the middle of November. So gentle do they sometimes become after these long journeys, that they have been seen to approach the farm-houses, associate with domestic fowls, and enter the stables and corn-cribs in quest of food. In this way, roaming about the forest, and feeding chiefly on mast, they pass the Autumn and part of the Winter.

About the middle of April, when the season is dry, the hens begin to look out for a place in which to deposit their eggs. This spot requires to be as much as possible concealed from the eye of the Crow, as that bird

* The term *mast*, in America, is used as a general name for the fruit of all kinds of forest-trees, including even grapes and berries.

often watches the Turkey when going to her nest, and waiting in the neighbourhood until she has left it, removes and eats the eggs. The nest, which consists of a few withered leaves, is placed on the ground, in a hollow scooped out by the side of a log, or in the fallen top of a dry leafy tree, under a canopy of sumach or briers, or a few feet within the edge of a cane-brake, but always in a dry place. The eggs, which are of a dull cream-colour sprinkled with dots, sometimes amount to twenty, although the more usual number is from ten to fifteen. When depositing her eggs, the female always approaches the nest with extreme caution, scarcely ever taking the same course twice; and when about to quit them, covers them carefully with leaves, so that it is very difficult for a person who may have seen the bird to discover the nest. Indeed, few Turkey's' nests are found, unless the female has been suddenly started from them, or a cunning Lynx, Fox, or Crow, has sucked the eggs, and left their shells scattered about.

The mother will not leave her eggs, when near hatching, under any circumstances, while life remains. She will even allow an enclosure to be made around her, and thus suffer imprisonment rather than abandon them. "I once witnessed," says Audubon, "the hatching of a brood of Turkeys, which I watched for the purpose of securing them, together with the parent. I concealed myself on the ground within a very few feet, and saw her raise herself half the length of her legs, look anxiously upon the eggs, cluck with a sound peculiar to the mother on such occasions, carefully remove each half-empty shell, and with her bill caress and dry the young birds, that already stood tottering and attempting to make their way out of the nest. Yes, I have seen

this, and have left mother and young to better care than mine could have proved,—to the care of their Creator and mine. I have seen them all emerge from the shell, and, in a few moments after, tumble, roll, and push each other forward with astonishing and inscrutable instinct."

THE DOMESTIC FOWL.

OF all the tenants of our farm-yard, this bird was the first domesticated. Its original country appears to have been Persia; but when it was first brought into Europe is uncertain. It is still to be found in a wild state in India, and in some of the islands of the Indian Ocean. A curious peculiarity exists in a wild species of this bird, which would be rather alarming to an English cook, the bones being covered with a thin skin of a black colour; whether a difference of food is the occasion of this, is unknown. The following account, from the works of Pliny, the Roman naturalist, may, perhaps, be amusing; for, although fanciful, it is extremely characteristic of the bird it describes:—

"After the Peacock, the birds which are most sensible to glory, are those active sentinels which nature has produced to arouse us from our morning slumbers and send us to our daily occupations. They are acquainted with the stars, and every three hours they indicate, by their crowing, the different periods of the day. They retire to repose with the setting sun, and from the fourth military-watch, they recall us loudly to our cares and labours. They do not suffer the day-beam to surprise us without timely warning. Their crowing announces the hour of morning. Each farm-yard has its peculiar king, and amongst these monarch, as amongst

princes of our own race, empire is the reward of victory. It is not uncommon for two rivals to perish in the combat. If one be conqueror, he immediately sings forth his triumph, and proclaims his own supremacy; the other retreats and disappears, ashamed of his defeat. The gait of the Cock is proud and commanding; he walks with head erect, and elevated crest. Alone, of all birds, he habitually looks up to the sky, raising, at the same time, his curved and scythe-formed tail, inspiring terror in the Lion himself, that most intrepid of animals. Its prolonged notes in the evening, and at extraordinary hours, constitute presages. By crowing all night long, these birds announced to the Bœotians a celebrated victory over the Lacedæmonians: thus did the diviners interpret it, because this bird, they say, never crows when he is conquered."

The courage of the Cock has been sadly misapplied in many parts of the world. In China, India, and the Philippine Islands, and all over the East, Cock-fighting is the sport and amusement even of kings and princes. In England it is declining every day, and is at present only the pastime of the lowest and most brutal. It is not simply against its own species that the Cock displays its courage: one, of less than a year old, has been known to attack a Sparrow-Hawk, throw him down, and detain him till a person came to secure the plunderer.

THE PHEASANT, (*Phasianus colchicus*.)

NEXT to the Peacock, the Pheasant is, perhaps, the most beautiful of our gallinaceous birds. Montbeillard says,—“It is sufficient to name this bird, to remind us of the place of its origin. The Pheasant, that is, the bird of Phasis, was, it is said, exclusively confined to Colchis,

before the expedition of the Argonauts. Those Greeks, ascending the Phasis to arrive at Colchis, beheld these fine birds spread along the bank of the river, and by bringing them back to their own country, bestowed upon it a gift more precious than the golden fleece."



THE PHEASANT.

At the present day, the Pheasants of Colchis, or Mingrelia, and some of the neighbouring countries, are the finest and largest in the known world.

The common Pheasant is found in almost every part of Europe, but is less common in the north. In a domesticated state this bird requires considerable care, and it is very difficult to rear it with success.

THE GROUS TRIBE.

THE BLACK GROUS, (*Tetrao tetrix*.)

THE Grouse was formerly common in the British Islands, but appears now to be chiefly confined to the north of Europe, although it is occasionally met with in Scotland.

In Russia, Norway, and other extreme northern countries, the Grouse are said to retire under the snow during the winter. The shooting of them in Russia is thus conducted: Huts full of loop-holes, like little forts, are built for the purpose, in woods frequented by these birds. Upon the trees, within shot of the huts, are placed artificial decoy-birds. As the Grouse assemble, the company fire through the openings, and so long as the sportsmen are concealed, the report of guns does not frighten the birds away; several of them may, therefore, be killed from the same tree, where three or four happen to be perched on branches one above another. The sportsman has only to shoot the undermost bird first, and the others upwards in succession. The uppermost bird is earnestly employed in looking down after his fallen companions, and keeps chattering to them till he becomes himself a victim.

THE PTARMIGAN, (*Tetrao lagopus*.)

THE Ptarmigan, or Snow Partridge, is a very common bird in the northern parts of Europe and America. In some countries, its plumage, which in Summer is of a fawn-colour, becomes, in the Winter season, of a most delicate white; at this time it nestles in holes in the snow, which it forms for the purpose of shelter.

THE PARTRIDGE, (*Perdix*.)

The affection of Partridges for their offspring is extremely great. Both the parents lead them out to feed, assisting them in finding their food by scratching the ground with their feet. They frequently sit close together, covering the young ones with their wings, and from this protection they are not easily roused. If,

however, they are disturbed, the male gives the first signal of alarm, by a peculiar cry of distress; throwing himself, at the same moment, more immediately in the way of danger, in order to mislead the enemy. He flutters along the ground, hanging his wings, and showing every symptom of debility. By this stratagem he seldom fails so far to attract the attention of the intruder, as to allow the female to conduct the helpless brood to a place of safety.

THE COMMON QUAIL, (*Tetrao coturnix*.)

THE Common Quail somewhat resembles the Partridge in its form, but is considerably less; it also differs from the last bird in its migratory habits. The Quails are very numerous in many parts of Europe; and appear in immense flock on the shores of the Mediterranean at the



THE QUAIL.

time of their Spring and Autumnal migrations. Such prodigious numbers have sometimes been seen on the western coast of the kingdom of Naples, that a hundred thousand have been caught in one day, within the space of three or four miles. Clouds of Quails also alight in Spring along the coasts of Provence: here they are sometimes found so exhausted, that, at first, they may

be caught with the hand. In some parts of the south of Russia they abound so greatly, that they are taken by thousands, and sent in casks to Moscow and Petersburg.

The strength of the migratory instinct in these birds is so great, that it has been powerfully evinced even in the captive state. Some young Quails had been bred up in cages from the earliest period of their lives, and having never enjoyed, could not feel the loss of liberty. For four successive years they were observed to be restless, and to flutter with unusual agitation, regularly in September and April; and this uneasiness lasted thirty days each time; it began constantly an hour before sunset. The birds passed the whole night in these fruitless struggles, and always on the following day appeared dejected and stupid.

THE PIGEON TRIBE.

THE birds composing the Pigeon tribe have always been objects of interest, from their numerous valuable and interesting qualities. Their attachment to their mate, and the great speed at which they travel, have, in many cases, been turned to the advantage of mankind, in carrying letters into besieged places, and for other purposes in which great expedition was required. In former times, the Consul of Alexandretta used to send news daily in five hours' time to Aleppo, by means of Pigeons; though these two places are three days' journey on horseback apart. The Dutch also, in several instances, resorted to the same mode of conveying intelligence, particularly at the siege of Haerlem, when information was conveyed to the besieged of the approach of relief, at a time when they were on the point of surrendering. Out of a

hundred and thirteen Pigeons brought from Brussels to London, in the summer of 1830, and let fly from the latter place on July 19, one reached Antwerp, one hundred and eighty-six miles distance, in five hours and a half; being at the rate of nearly thirty-four miles an hour. Another went from London to Maestricht, two hundred and sixty miles, in six miles and a quarter.

The inner surface of the crop of a Pigeon, at the time it has to attend to the feeding of its young, undergoes a very singular change, becoming much thickened, and secreting in abundance a kind of liquid for the purpose of softening the food with which it supplies its young; the most curious part of the subject is, that the same thing takes place in the crop of the male bird, as well as in that of the female, a circumstance, the cause of which, yet remains unexplained.

THE PASSENGER PIGEON OF AMERICA,

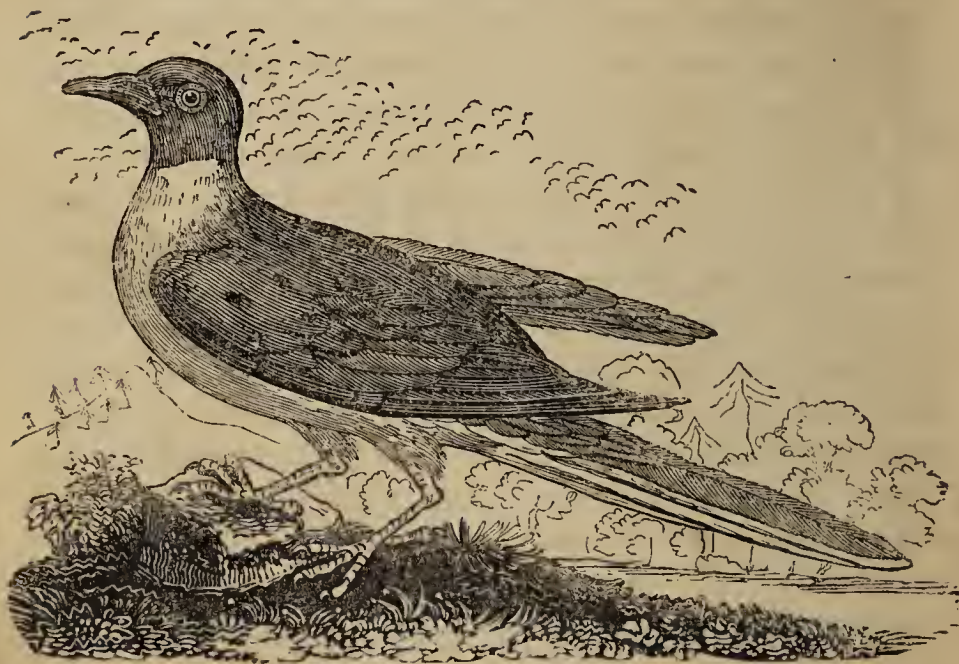
(*Columba migratoria.*)

THE immense number of the species shown in the engraving, and the rapidity of their flight, is thus described by the celebrated ornithologist, M. Audubon.

“The air was literally filled with Pigeons; the light of noon-day was obscured as by an eclipse; the dung fell in spots, not unlike melting flakes of snow; and the continued buzz of wings had a tendency to lull [my senses to repose.

“The banks of the Ohio were crowded with men and boys, incessantly shooting at the pilgrims, which there flew lower as they passed the river. Multitudes were thus destroyed. For a week or more the population fed on no other flesh than that of Pigeons, and talked of

nothing but Pigeons. The atmosphere, during this time, was strongly impregnated with the peculiar odour which emanates from the species.



THE PASSENGER PIGEON OF AMERICA.

“Let us now inspect their place of nightly rendezvous. One of these curious roosting-places, on the banks of the Green River, in Kentucky, I repeatedly visited. It was, as is always the case, in a portion of the forest where the trees were of great magnitude, and where there was little underwood. I rode through it upwards of forty miles, and crossing it in different parts, found its average breadth to be rather more than three miles. My first view of it was about a fortnight after the period when they had made choice of it, and I arrived there nearly two hours before sun-set. Few Pigeons were then to be seen; but a great number of persons, with horses and wagons, guns and ammunition, had

already established encampments on the borders. Two farmers from the vicinity of Russelsville, distant more than one hundred miles, had driven upwards of three hundred Hogs to be fattened on the Pigeons which were to be slaughtered. Here and there the people employed in plucking and salting what had already been procured, were seen sitting in the midst of large piles of these birds. Many trees, two feet in diameter, I observed were broken off at no great distance from the ground, and the branches of many of the largest and tallest had given way, as if the forest had been swept by a tornado. Every thing proved to me that the number of birds resorting to this part of the forest must be immense beyond conception. As the period of their arrival approached, their foes anxiously prepared to receive them: some were furnished with iron pots containing sulphur, others with torches of pine-knots, many with poles, and the rest with guns. The sun was lost to our view, yet not a Pigeon had arrived: everything was ready, and all eyes were gazing on the clear sky, which appeared in glimpses amidst the tall trees. Suddenly there burst forth a general cry of 'Here they come!' The noise which they made, though yet distant, reminded me of a hard gale at sea, passing through the rigging of a close-reefed vessel. As the birds arrived and passed over me, I felt a current of air that surprised me. Thousands were soon knocked down by the pole-men. The birds continued to pour in. The fires were lighted, and a magnificent, as well as wonderful, and almost terrifying sight, presented itself. The Pigeons, arriving by thousands, alighted every where, one above another, until solid masses, as large as hogs-heads, were found on the branches all around; here

and there the perches gave way under the weight, with a crash, and, falling to the ground, destroyed hundreds of the birds beneath, forcing down the dense groups with which every stick was loaded. It was a scene of uproar and confusion; I found it quite useless to speak, or even shout, to those persons who were nearest to me; even the reports of the guns were seldom heard, and I was made aware of the firing only by seeing the shooters re-loading.

“No one dared venture within the line of devastation. The Hogs had been penned up in due time, the picking up of the dead and wounded being left for the next morning’s employment. The Pigeons were constantly coming, and it was past midnight before I perceived a decrease in the number of those that arrived. The uproar continued the whole night. Towards the approach of day, the noise in some measure subsided: long before objects were distinguishable, the Pigeons began to move off in a direction quite different from that in which they had arrived the evening before, and at sunrise all that were able to fly had disappeared. The howlings of the Wolves now reached our ears, and the Foxes, Lynxes, Cougars, Bears, Racoons, Opossums, and Polecats, were seen sneaking off; whilst Eagles and Hawks of different species, accompanied by a crowd of Vultures, came to supplant them, and enjoy their share of the spoil.”

OF RUNNING BIRDS.—(Order, CURSORES.)

THE Cursores, or *runners*, were formerly included among the Grallæ, but have latterly been very properly sepa-

rated from them, and formed into a distinct order. It is only in the great length of their legs that the Cursores bear any resemblance to the Waders: in all other respects they differ materially. Their long legs also were given to them for a very different purpose, namely, to enable them to escape from their enemies by running, the greater portion of their number being badly furnished with wings. They have been divided into two families:—

Birds distinguished by their short wings	Family, <i>Brevipennes</i> .
Birds with compressed bills	Family, <i>Pressirostri</i> .

OF BIRDS WITH SHORT WINGS.

(Family, *Brevipennes*.)

THE birds belonging to this family are few in number, and, owing to the shortness of their wings, and the unwieldy size of their bodies, they are incapable of rising from the earth, and are therefore obliged to depend on their legs as the means of escaping from danger. They inhabit the extensive plains of Europe, Asia, Africa, South America, and New Holland.

THE OSTRICH TRIBE.

OF birds that resemble the Ostrich, there are four different species: the Ostrich of Africa; the Cassowary, a native of India; the Emu, of New Holland; and the Rhea, of South America.

THE OSTRICH, (*Struthio Camelus*.)

Is a native of Africa, and very widely spread over that extensive continent. The Ostrich is by far the largest



THE OSTRICH.

and tallest of all the feathered creation, a full-grown bird frequently measuring as much as eight feet in height.

It was called by the ancients the Camel-bird, and, as far as a quadruped and a bird can be compared, the name was far from inappropriate. Its wings are very small and imperfect, and utterly useless as organs of flight; and the breast-bone, instead of possessing a *keel*, as is usual in birds, is completely flat, as in a quadruped; the legs are amazingly strong and muscular, and the toes, which are but two on each foot, bear a strong resemblance to a Camel's hoof. The Ostrich is extremely mild and timid in its character, and generally depends for safety on the speed with which it can run. The Arabs are in the habit of hunting these birds with Horses, and the chase is considered an act requiring great skill and courage, on account of the impetuous manner in which the huntsman is obliged to ride, and the length of time it lasts. Vegetable and animal substances are eaten alike by this voracious bird, and it will swallow greedily small pieces of metal, as nails, keys, and pieces of coin. Its strength is so great, that a young bird has been known to carry two negroes at once, with a speed exceeding that of a race-horse.

The nest of the Ostrich is simply a hole scratched in the sand, in which the eggs are deposited, sometimes in considerable numbers. The male and the female alternately perform the task of incubation; and from the following anecdote, it would seem that the eggs in one nest are frequently the production of several females. M. le Vaillant, during his travels in Southern Africa, found a female Ostrich on a nest containing thirty-two eggs, and twelve eggs were arranged at a little distance,

each in a separate cavity prepared for it. He remained near the place some time, and saw three other females come, and alternately seat themselves in the nest; each sitting for about a quarter of an hour, and then giving place to another, who, while waiting, sat close to the side of her she was to succeed. The twelve eggs that were arranged near the nest were intended as food for the young immediately on their quitting the shell. In the interior of their eggs are frequently discovered a number of small oval-shaped pebbles, about the size of a large pea, of a pale-yellow colour, and exceedingly hard; as many as twelve have been found in one egg. These stones are sometimes set, and used as buttons. The eggs are considered a great delicacy, and are prepared as food in various ways; but the best plan is said to be to bury them in hot ashes, and through a hole made in the upper end to stir the contents round till they acquire the consistence of an omelet. The weight of an Ostrich's egg is about three pounds. But the most valuable productions of the male bird are the feathers with which its wings and tail are adorned; these feathers, in their unprepared state, are worth as much as 16*l.* or 18*l.* per pound weight. The skin of the Ostrich is also valuable, and, from its great thickness, it is employed by some of the warlike tribes of Africa in forming their shields and other defensive armour.

THE CASSOWARY, (*Struthio Cassuarius*, Linn.)

THE Cassowary may be called the Indian Ostrich. It is found only on the continent of India, and some of the large islands of the Indian Ocean. It differs from the Ostrich in its covering, which more resembles hair or thin strips of whalebone than feathers, and also in want-

ing those beautiful plumes on the wings and tail ; and in having three toes, while the Ostrich has but two : in other respects its manners and appearance are much the same. The Cassowary of India may be distinguished from the Emu of New Holland by the horny helmet which covers the summit of its head. The Emu is also a much larger bird.

THE DODO, (*Dipus ineptus*.)

THIS bird was originally found in the great African island of Madagascar, but, from all accounts, it



THE DODO.

has for some years ceased to exist. It is said to have been seen in great numbers in the year 1614 by the

celebrated Portuguese navigator, Vasco de Gama. Legual, who visited the Island of Rodriguez, in 1691, also gives a long account of a bird, supposed to be a species of the Dodo, which he calls the Solitaire. Though generally represented as clumsy in form, he speaks of it as graceful and dignified in its movements, and as possessing great beauty. Although it would allow itself to be approached, yet, when caught, it was incapable of being tamed, and refused nourishment till it died. When the Dodo finally disappeared is unknown, but no traces have been found of it since the commencement of the eighteenth century. The only remains at present existing, are a foot in the British Museum, and a head and foot in the Ashmolean Museum at Oxford; there is a painting of the bird itself also in the British Museum, copied from an original by a Dutch artist.

OF BIRDS WITH COMPRESSED BEAKS.

(Family, *Pressirostri*.)

THE BUSTARD TRIBE.

THE Bustards appear to fill the same place among the European birds, as the Ostriches do in the other quarters of the globe; like them, they more frequently use their wings to assist them in running, than for the purpose of flight. They frequent sandy and stony plains, distant from the neighbourhood of waters, and live on grains, worms, roots, and insects.

THE GREAT BUSTARD, (*Otis tarda*.)

Is the largest of the British land-birds, and weighs

from twenty-five to thirty pounds; the female is not above half the size of the male, and the colour of her plumage is less bright; but the greatest distinction between the sexes, consists in the male being furnished with a sac, or pouch, which is situated in the fore part of the neck, capable of containing about two quarts of liquid; the entrance to the pouch is immediately under the tongue. This singular reservoir was first discovered by Dr. Douglas, who supposes that the bird fills it with water, to supply its wants in the midst of those dreary plains over which it is accustomed to wander; it likewise employs it when defending itself against the attack of birds of prey; on these occasions throwing out the water with so much violence, as not unfrequently to baffle the pursuit of its enemy. These birds were formerly found in considerable numbers in this country and in Scotland; from the latter place they have entirely disappeared. In England a single specimen is now and then met with, generally on Salisbury Plain, in Wiltshire, or amid the dreary wastes of Dartmoor, in Devon.

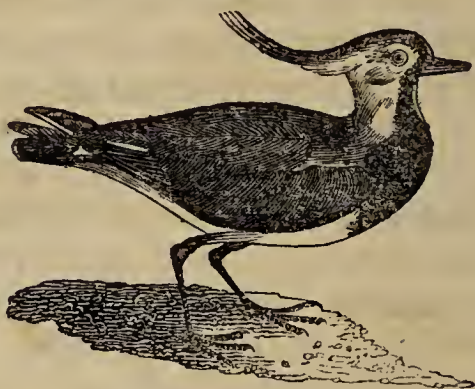
THE PLOVER TRIBE.

THE LAPWING, OR PEWIT,

(*Vanellus cristatus*.)

THE Lapwing is about the size of a Pigeon, and is frequently seen in great numbers by the sea-shores, where it finds an abundant supply of the food on which it subsists, such as worms, and insects of all kinds. It is an extremely graceful and active bird, and sports and frolics in the air in all directions; it runs along the

ground very nimbly, springing and bounding from spot to spot with great agility. Two Lapwings were put into a garden, where one of them soon died; the other continued to pick up such food as the place afforded, till winter deprived it of its usual supply, and necessity



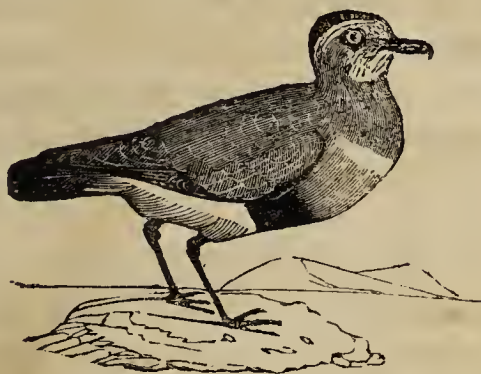
THE LAPWING.

soon compelled it to draw nearer to the house. At length one of the servants, when she had occasion to go into the back-kitchen with a light, observed that the Lapwing always uttered his cry, "Pee-wit," to obtain admittance. He soon grew more familiar: as the winter advanced, he approached as far as the kitchen, but with much caution, as that part of the house was generally occupied by a Dog or Cat; the Lapwing, however, soon conciliated these dreaded creatures so entirely, that it was his regular custom to resort to the fire-side as soon as it grew dark, and spend the evening and night with his two associates, sitting close by them, and partaking of the comforts of a warm rug. As spring appeared, he betook himself to the garden, but returned again to his old friends at the approach of winter. Security was productive of insolence; what was first obtained with caution, was afterwards taken without reserve; he fre-

quently amused himself with washing in the bowl which was set for the Dog to drink out of, and, while he was thus employed, showed marks of great indignation if either of his companions presumed to interrupt him.

THE DOTTEREL, (*Charadrius morinellus*.)

THE Dotterel is common in England and in many parts of Europe, but is not very generally distributed, being found only in some particular spots. This little bird is



THE DOTTEREL.

noted for the delicacy of its flesh as an article of food. and the great 'dulness or stupidity it displays, in not avoiding the sportsman.

OF WADING, OR STILTED BIRDS.

(Order, GRALLÆ.)

THE birds belonging to this order are distinguished by the great length of their legs, which have been aptly compared to stilts, and from this circumstance they have taken their name, *Grallæ*, which is a Latin word having that meaning. They are generally frequenters of shallow waters, the margins of lakes and rivers, and the sea-

coasts, seeking for worms, shell-fish, and insects, on which they subsist. They have been divided into three families :—

- Birds with knife-shaped bills . . . Family, *Cultirostri*.
 Birds with long bills Family, *Longirostri*.
 Birds with large feet Family, *Macroductyli*.
-

OF BIRDS WITH KNIFE-SHAPED BILLS.

(Family, *Cultirostri*.)

THE *Cultirostri* are known by their thick and strong bills, generally pointed and sharp-edged ; they may be separated into three tribes,—CRANES, HERONS, and STORKS.

THE CRANE TRIBE.

THE bill of the Cranes is not so long as that of the Herons and Storks, and is less widely opened, that is, the gape or angle of the mouth is before the eye. The bill of the Herons is divided beyond the hinder part of the eye, while in that of the Storks the division is moderately deep, but in these last the beak is much larger and stronger than in the other two.

THE TRUMPETER BIRD, (*Psophia crepitans*.)

Is a native of South America, inhabiting the barren mountains and uplands of that vast continent. It has acquired the name of Trumpeter Bird, from its peculiar cry, which resembles in some measure the notes of a trumpet. The Trumpeter Bird is very easily tamed, and will attach itself to the person who takes care of it with as much fidelity as a Dog, following its master about in every direction, and readily obeying his voice.

It goes out alone, proceeds to a great distance without losing itself, and invariably returns home at night. It is even said that it will accompany flocks of sheep (the care of which is confided to it) to the pasture, and bring them back in the evening to the habitation of their owner. It is, however, more certainly known, that in the poultry-yard it becomes master of the Hens and other domestic birds, obliging the laggards to enter the lodging prepared for them in the evening, and reposing itself afterwards on the roof, or on some neighbouring tree.

The Trumpeter Bird has been placed by some writers in the order Gallinæ, and in some respects, particularly in the form of its bill, it certainly resembles the poultry-kind.

THE HERON TRIBE.

THE COMMON HERON, (*Ardea cinerea*,)

Is about three feet three inches in length; it is found in almost every climate, and is a formidable enemy to all descriptions of fish. There is hardly a fresh-water fish, however large, that it will not pursue and wound, even if it is unable to carry it off; it generally, however, lives upon the smaller fry. Its method is to wade as far as it can into the water, and there patiently wait the passing-by of its victims. Willoughby says, he has seen a Heron that has had in his stomach no fewer than seventeen Carp. A gentleman who kept tame Herons, was desirous of ascertaining what average number one of these birds would devour; he therefore put a quantity of small Roach and Dace into a tub, and the Heron, one day with another, ate fifty a-day. Thus, a single bird is

able to destroy 18,000 store fish in the space of a year. In former times the capture of Herons, by means of Hawks trained for that purpose, was a favourite amusement; and a fine was inflicted on any one detected taking their eggs.

THE AGAMI HERON, (*Ardea agami.*)

THIS magnificent bird inhabits Cayenne and Surinam. It is about two feet and a half in length, and the colours



THE AGAMI HERON.

of its plumage are extremely rich; the feathers of the crest being of a light azure, and the back, wings, and tail, of a deep rich blue.

THE BITTERN, (*Ardea stellaris*.)

THOSE who have walked in an evening by the sedgy sides of unfrequented rivers, must remember a variety of notes from different Water-fowl: the loud scream of the Wild Goose, the croaking of the Mallard, the whining of the Lapwings, and the tremulous neighing of the Jack Snipe. But of all these sounds, there is none so dismally hollow as the booming of the Bittern. It is impossible for words to give those who have not heard this evening call, an adequate idea of its solemnity. It is like the interrupted bellowing of a bull, but hollower and louder, and is heard at a mile's distance, as if issuing from some formidable being residing at the bottom of the waters.



THE BITTERN.

The bird, however, that produces this terrifying sound is not so big as a Heron, with a weaker bill, not above four inches in length. This bill is nevertheless a power-

ful weapon of defence, and the bird, when disturbed on its nest, is rather a formidable enemy.

It differs from the Heron chiefly in colour, which is, in general, of a palish yellow, spotted and barred with black. Its windpipe is formed to produce the sound for which it is remarkable; the lower part of it, where it divides to enter the lungs, being supplied with a thin loose membranous bag, that can be filled with a large body of air, and exploded at pleasure. These bellowing explosions are chiefly heard from the beginning of spring to the end of autumn.

THE STORK TRIBE.

THE WHITE STORK, (*Ciconia alba.*)

THE White Stork, although well-known on the Continent, is but rarely taken in this country. The amiable and sociable qualities of this bird have been for ages known and respected; in selecting a place for its nest, it resorts to streams and woods in the neighbourhood of crowded cities, building on the summit of old buildings and chimneys, seeking, not shunning, the society of man. Its good qualities, however, are more highly respected in the East than in any part of Europe; to have a Stork for his neighbour is considered by an Arab as a sufficient assurance of the safety and welfare of his family. Among the Turks its destruction is prohibited, and in Constantinople its familiarity is so great, that it will build its nest within reach in the most public streets. In ancient Thessaly a law was in existence imposing the penalty of death on any person who destroyed one of

these birds. Perhaps the original cause of the respect shown to the Stork might have been the great service it renders mankind by destroying snakes and other noxious reptiles. The Stork is a migratory bird, and leaves Europe for the continent of Africa in the autumn, but returns in the spring for the purpose of breeding; it always occupies the same nest.

The female Stork is equal to any other bird in its affection for its young, and an instance is mentioned which occurred during a great fire at the city of Delft, in which the mother perished in the flames rather than desert her offspring. But the most amiable trait in the character of the Stork is the kindness of the young for their parents. This filial affection was so well known to the ancient Greeks, that a law which obliged children to support their parents when they became old, received its name from the Stork.

THE GIGANTIC CRANE, (*Ciconia marabou.*)

THIS uncouth creature is found in great numbers on the banks of the rivers of Bengal, and also in some parts of Africa. It has had the name of the Adjutant given to it by the English residents in India, from its bearing some resemblance, when at a distance, to a man in a white waistcoat and dark trowsers. The Adjutants are never molested by the natives, who have a peculiar veneration for them, and believe them to be the receptacles of the souls of the Brahmins. The author of the *View of Hindostan* says, that when he missed his shot at several of them, the standers-by greatly exulted, and declared he might shoot at them for ever without succeeding.

At Sierra Leone, a young bird, of a species nearly

allied to that of Bengal, and about five feet in height, was brought up tame; and being accustomed to be fed in the great hall, soon became familiar, duly attending at dinner-time, placing itself behind its master's chair, frequently before the guests arrived. The servants were obliged to watch narrowly, and to defend the provisions with switches; but notwithstanding, it would frequently seize something or other, and once purloined a whole boiled fowl, which it swallowed in an instant.

Every thing is swallowed whole; and so accomodating is its throat, that not only an animal as big as a cat is gulped down, but a shin of beef, broken asunder, serves it but for two morsels. It has been known to swallow a leg of mutton of five or six pounds, a hare, and even a small fox.

THE WHITE SPOONBILL,

(*Platalea leucorodia*.)

THE singular shape of the bill of this bird has caused it to acquire its present name.

It is found in various parts of the old continent, from the Feroe Islands, near Iceland, as far south as the Cape of Good Hope. It frequents the neighbourhood of the sea, and has been met with on the coasts of France; at Sevenhuys, near Leyden, it was once in great plenty, annually breeding in a wood there. The nest is placed in high trees near the sea-side.

The following vivid description of the assemblage of these birds and others in an African lake, is from the pen of the unfortunate Major Denham:

“By sunrise I was on the borders of the lake, armed for the destruction of the multitude of birds, who, all

unconscious of my purpose, seemed, as it were, to welcome my arrival. Flocks of Geese and Wild Ducks, of a most beautiful plumage, were quietly feeding within half-pistol-shot of where I stood ; and not being a very keen or inhuman sportsman, for the terms appear to me to be synonymous, my purpose of deadly warfare was almost shaken. As I moved towards them, they only changed their places a little to the right or left, and appeared to have no idea of the hostility of my intentions. All this was really so new, that I hesitated to abuse the confidence with which they regarded me. Pélicans, Cranes, four or five feet in height, gray, variegated, and white, were scarcely so many yards from my side ; and a bird between a Snipe and a Woodcock, resembling both, and larger than either, immense Spoonbills of a snowy whiteness, Widgeon, Teal, Yellow-legged Plover, and a hundred species of (to me at least) unknown Water-fowl, were sporting before me ; and it was long before I could disturb the tranquillity of the dwellers on these waters by firing a gun."

OF BIRDS WITH LENGTHENED BEAKS.

(Family, *Longirostri*.)

WE may popularly divide this family into CURLEWS, with a curved bill bent downwards ; SNIPES, with a straight bill ; GODWITS, with a straight bill, slightly arched on the top, and longer than that of the Snipes ; SANDPIPERS, with a bill resembling the Godwits, but much shorter ; and AVOSETS, with a bill curved upwards.

*THE CURLEW TRIBE.***THE SACRED IBIS, (*Ibis religiosa*.)**

THE idolatrous nations of ancient Egypt bestowed divine honours upon the bird here represented; and its em-



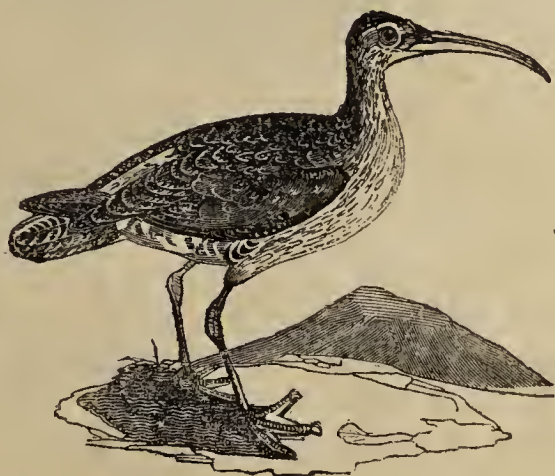
THE SACRED IBIS.

balmed body is frequently met with in the Egyptian tombs. It has been suggested, that the origin of this

reverence for the Ibis arose from the supposed services rendered by it in the destruction of reptiles; but the same respect was shown to Cats, Monkeys, and other animals, who had not this claim upon their regard. When the waters of the Nile recede, these birds are found in considerable numbers, seeking their food among the slime and weeds; and their association with this commencement of a season of fertility, may perhaps have caused the Ibis to receive a notice which would not otherwise have been conferred upon it.

THE COMMON CURLEW, (*Numenius arcuatus*.)

THE bill of the Curlew is much less arched than that of the Ibis; it is a native of most parts of Europe, even as far north as Siberia, and has been met with also in



THE CURLEW.

Egypt. It used formerly to be more highly esteemed as food than it is at present. The sea-coast, and the muddy banks of rivers, are its usual haunts, where it feeds upon any small animals it can meet with.

THE SNIPE TRIBE.

THE COMMON SNIPE, (*Scolopax gallinago*.)

THE Snipe, in outward appearance, very much resembles the Woodcock, but it is much more commonly met with; indeed, there is hardly any part of the globe in which these birds have not been taken. They are observed to be incessantly employed in picking the ground, and it has been remarked, that their tongue terminates in a sharp point, proper for piercing small worms, on which, probably, they feed. Nothing is found in their stomach but liquid and an earthy sediment, which is most likely



THE SNIPE.

the digested bodies of the worms, and the earth that enters along with them. As an article of food, they are not held in such high esteem as the Woodcock; but they are still, in many places, a favourite dish.

THE AVOSET, (*Recurvirostra Americana*.)

THE bill of the Avoset is formed in a most singular manner, and resembles, from its dark colour and slender form, two pieces of whalebone curved upward at the tip; this peculiar form allows it to scoop up its food, as

worms, insects, and small shell-fish, from the mud or sand in which it is found. In the south of England the Avosets are common about the mouths of rivers and marshes, and assemble in large flocks on the Fens in the breeding-season. When the female is frightened off her nest, she counterfeits lameness; and when a flock is disturbed, they fly with their necks stretched out and their legs extended behind, over the head of the spectator, much in the same way as the Lapwing, making a shrill noise, and uttering a yelping cry of "twit, twit," all the time. The Avoset frequenting deeper waters than the rest of the Waders, is provided with feet partially webbed, to assist it in swimming, and in that respect it resembles the birds of the next order.

THE RUFF, (*Tringa pugnax*.)

THE female of this singular bird is called the Reeve, and is entirely destitute of the speckled collar, or ruff,



THE RUFF.

which gives name to the male; it is, also, only in the spring of the year that the male itself is thus ornamented.

It is a singular fact in the history of this bird, that the colour and markings of the feathers scarcely ever agree in any two specimens. Buffon says, that upwards of a hundred were examined at one time, and no two were alike. The males are of a most quarrelsome disposition, and fight in the most desperate manner, selecting a spot of ground which they traverse in every direction, uttering a peculiar cry of defiance.

OF BIRDS WITH LARGE FEET. (Family, *Macrodactyli.*)

THE RAIL TRIBE.

THESE birds are all distinguished by the great length of their toes; they feed upon aquatic insects and larvæ, and frequent marshes and the margins of rivers overgrown with reeds; their enormous feet allowing them to pass readily over the weeds and grass, without the risk of sinking into the mud, and becoming entangled among the roots of the water-plants.

THE FAITHFUL JACANA, (*Parra Chavaria.*)

THE Jacana is found near Carthagena, on both sides the river Plata, in places where the water is low, and especially in marshes.

Though the arms of the Jacana, the size of its body, and its sonorous voice, all give it the appearance of a warrior-bird, its character is rather mild, but it will not permit the approach of birds of prey, and is particularly at war with the Vulture. Accordingly, the inhabitants of the country in which it is found rear it up in their poultry-yards, where, like the Trumpeter Bird already

noticed, it becomes the protector of the Fowls, feeds along with them, follows them into the fields, and accompanies them home at night; on this account it has received the name of the Faithful Jacana.

THE FLAMINGO, (*Phœnicopterus ruber.*)

THE Flamingo is the last of the Waders we shall have to notice; but although placed at the end of this family, it



THE FLAMINGO.

can hardly be said to have any characters in common with the other birds of which it is composed, if we except the length of its legs. Its feet are webbed like those of the Avoset, and adapted for swimming; the form of its bill also is very singular, as well as the mode in which it employs it. The Flamingo, like all the Waders, feeds upon different substances which it finds in the mud or sand; but instead of placing its bill on the ground with the lower mandible underneath, it completely reverses its head, and scoops up the sand which contains its provender, with the upper portion of its bill. These birds are in the habit of arranging themselves along the shore, in long and regular ranks, and their colour being a bright scarlet, this practice was once the occasion of a curious mistake. "During the French revolutionary war, when the English were expected to make a descent upon St. Domingo, a negro having perceived, at the distance of some miles, in the direction of the sea, a long file of Flamingoes, ranked up, and preening their wings, forthwith magnified them into an army of English soldiers; their long necks were mistaken for shouldered muskets, and their scarlet plumage had suggested the idea of a military costume."

OF WATER-BIRDS WITH WEBBED FEET.

(Order PALMIPEDES.)

THE birds belonging to this order have feet and legs adapted for swimming. For this purpose they are placed very far back, and consequently they are all, to a greater or less extent, awkward in their movements on land; the intervals between their toes are also furnished

with a connecting membrane. They are the only tribes of birds in which the neck is longer than the legs; in some cases considerably so, particularly in the Swan. The intention of this great length of neck is to enable it, while running on the surface of the water, to reach its food, which is frequently found below it. The whole of the order is separated into four families:—

Birds with short wings	Family, <i>Brachyptera</i> .
Birds with lengthened wings	Family, <i>Longipennes</i> .
Birds with feet completely webbed .	Family, <i>Totipalmatæ</i> .
Birds with plated, or scaly beaks . .	Family, <i>Lamellirostri</i> .

OF WEB-FOOTED BIRDS WITH SHORT WINGS, (Family, *Brachyptera*.)

THE whole of this family are admirably formed for pursuing their prey, which consists of different kinds of fish, beneath the surface of the water; they have, therefore, acquired the name of *Divers*. Their short wings are of scarcely any service to them for the purposes of flight, but underneath the water they can employ them in the same manner as fins; the legs are also placed further back than in any other tribes of water-fowl, and their walk is very unsteady and awkward. Their covering has more the appearance of a kind of silvery hair than that of feathers, and it is so extremely close as to be perfectly waterproof; on this account the skins of these birds are sometimes used for the purpose of making muffs. The activity of some of these creatures, when in the water, is most amazing: they are frequently able to elude the shot of the fowler by suddenly diving; it is, therefore, a common practice to place a piece of pasteboard in front of the gun-lock, to prevent the bird seeing the flash.

THE GREBE TRIBE.

IN these birds, instead of possessing true webs, the toes are enlarged, and only partially united to each other at the base. "It appears," says Cuvier, "that in certain circumstances they carry their young under their wing."

THE EARED GREBE, (*Podiceps auritus*.)

The Eared Grebe is met with in many of the colder parts of the world, both in the northern and southern



THE EARED GREBE.

hemispheres. In England it is rather a rare visiter. These birds live in lakes and ponds, and build among

the rushes. Their principal food consists of fish, in taking of which they are extremely dexterous. Their plumage undergoes so much change through age, that the different species have been frequently confounded.

THE GUILLEMOT TRIBE.

THE bill of the Guillemots is of the same form as that of the Grebes, but is covered with feathers down to the nostrils. The limited power of motion possessed by the birds of this genus, when on land, and the difficulty they therefore have of avoiding capture, has obtained for them an undeserved character of stupidity; and the older writers, in speaking of some species, nearly allied to this, give them the name of Boobies. Dampier gives a curious account of the hostilities between what he calls "Man-of-war Birds," (the Frigate Pelican,) and the Boobies, in the Alcrane Islands, on the coast of Yucatan. "These birds were crowded so thickly, that I could not pass their haunts without being incommoded by their pecking. When I struck them, some flew away, but the greater number remained, and would not stir, notwithstanding all I could do to rouse them. I remarked, also, that the Man-of-war Birds and the Boobies always placed sentinels over their young ones, especially when they went to sea for provisions. Of the Man-of-war Birds many were sick or maimed, and seemed unfit to procure their subsistence. On one of the islands I once saw more than twenty sally out from time to time into the open country, in order to carry off booty. When one of them surprised a young Booby that had no guard, he gave it a violent

peck on the back to make it disgorge, which it did instantly ; casting up one or two fish about the bulk of one's hand, which the old Man-of-war Bird swallowed. The vigorous ones play the same game with the old Boobies which they find at sea. I saw one myself which flew right against a Booby, and with one stroke of his bill made him deliver up the fish he had just swallowed ; the Man-of-war Bird darting so rapidly as to catch the fish in the air before it could fall into the water."

THE AUK TRIBE.

THE Auks, or Puffins, are distinguished by their peculiarly-shaped bill, which is very much flattened on the sides, short, and much arched. Sir A. de Capell Brooke describes a very curious method of taking these birds at the North Cape.

"The Puffins sitting together in prodigious numbers in holes and clefts of the rocks, are taken by means of small Dogs which are trained to the sport ; one of these Dogs is sent into the recess, and seizes the first bird he comes to by the wing. This, to prevent its being carried away, lays hold, with its strong beak, of the bird next to it, which in like manner seizes its neighbour, and the Dog continuing to draw them out, a long string of these birds fall into the hands of the fowler."

OF WATER-BIRDS WITH LENGTHENED WINGS. (Family, *Longipennes*.)

THE feathered tribes which belong to this family are all noted for their great power of wing, and in most instances

for their rapacity ; the stronger species are constantly at war with the weaker, and carry on a perpetual system of plunder.

THE STORMY PETREL, (*Procellaria pelagica.*)

THESE are the birds whose appearance is so dreaded by the sailor, by whom they are familiarly called *Mother Carey's Chickens*, and their presence is considered as the sure forerunner of a storm. Of all the Water-birds, the Petrels are the least frequently seen on shore ; they appear to delight in the war of the elements, and in the midst of the most violent storm they may be heard screaming with delight as they hurry by ; should the wind be too powerful for them, they seek refuge in the hollow of the wave, and there in safety they ride out the roughest gales. It is only when obliged to seek the shore for the purpose of hatching their young, that they are to be met with on land. Their nests are formed in the hollows of the most inaccessible rocks.

The Petrels possess a singular mode of defence. Their two nostrils are united, forming a tube with one opening, on the upper part of the bill ; this tube communicates with the stomach, in which there is always found a quantity of liquid, like oil, which it can suddenly squirt into the eyes of its assailant, who frequently, not expecting the attack, loses his footing, and falls a victim to his temerity.

The species of this bird are rather numerous, particularly in the Antarctic seas.

THE WANDERING ALBATROSS,

(Diomedea exulans.)

Is the largest of all the Water-birds; it inhabits the Southern Ocean in every latitude, from the Cape of Good



THE ALBATROSS.

Hope to New Holland, living on fish and other substances; it is said to devour its finny prey in so gluttonous a manner, that often one-half of the body remains outside until the part which is swallowed, being dissolved by digestion, leaves a passage for the rest. These birds often gorge to such a degree as to be unable to fly, or to escape the boats which pursue them. The flesh of the Albatross is hard and ill-flavoured; mariners, however, contrive to render it eatable, when they are in want of fresh provisions, by taking off the skin, and suffering the body to soak in salt water for four-and-twenty hours, and then boiling it, and eating it with some relishing sauce.

THE GULL TRIBE.

THE GREAT BLACK-BACKED GULL,

(*Larus maximus*.)

THE Gulls are to be found in every part of the globe, and from their propensity to feed on putrid, as well as fresh animal substances, have been called *Sea Vultures*. The larger kinds are so extremely daring as to suffer themselves to be taken in the following singular manner: a fish was placed on the point of a knife and held in the air; a Gull which was soaring above, in search of food, perceived the tempting bait, and precipitated itself upon it with so much violence as to be transfixed on the weapon. Like some of the birds we have already noticed, the stronger species will forcibly deprive the weaker of their prey. The great Black-backed Gull, not uncommon in England, is one of these predatory birds.

THE TERN OR SEA-SWALLOW TRIBE.

THE Terns have been called Sea-Swallows, from the resemblance they bear, to Swallows in the great length of their wings, and their very rapid flight. They continue for a long time on the wing and in their quick and



THE SANDWICH TERN.

circling evolutions rise and sink in the air, or glide along near the surface of the waters, sometimes snapping at the insects in their way, or, suddenly checking their course, darting down on their finny prey, which they swallow as they rise, without delaying their progress. They are met with in every part of the globe.

OF BIRDS WITH FEET COMPLETELY
WEBBED. (Family, *Totipalmatæ*.)

IN these birds the short toe or thumb is united to the others by a membrane, thus making the foot a more perfect organ of swimming than it otherwise would be.

THE PELICAN TRIBE.

THE GREAT WHITE PELICAN,

(Pelicanus onocrotalus.)

THE bill of the Pelican is extremely large, and curved on the upper surface, but the most singular part of its construction is the curious bag which is attached to the under mandible; this bag reaches from the tip of the



THE GREAT WHITE PELICAN.

bill as far back as the throat, and is said to be capable of containing as much as fifteen quarts of water. A

foreign author has said that it will hold as many fish as will serve sixty hungry men for a meal. It is at present chiefly confined to the continent of Africa.

It is related of a Pelican which was brought alive to the court of the King of Bavaria, where it lived forty years, that it was much delighted with the company and conversation of men, and with music, both vocal and instrumental; for it would willingly stand by those that sung or sounded the trumpet, stretching out its head and turning its ear to the music, listening very attentively to the melody, although its own voice was little pleasanter than the braying of an ass.

The Pelican was said by the ancients to feed its young with its own blood, and was consequently held up as a pattern of parental affection. This fable most likely arose from the appearance of the bird while pressing its pouch against the breast for the purpose of disgorging part of its prey for its young, the scarlet tip of the bill contrasted with the delicately-white colour of its breast-feathers, giving the spectator an idea that the Pelican was wounding itself.

THE CORMORANT, (*Carbo cormoranus*.)

THE Cormorant is one of the most voracious of the Water-birds, and its desire for food is almost unrelenting,—for ever craving, it is never satisfied. The skill of the Cormorant in taking the fish on which it preys, is very great. In some countries this faculty has been turned to the advantage of mankind, more particularly in China, where these birds are regularly trained for the purpose, and the owners carry them out to the fishing-stations in their boats, having tied a thong of leather round their throat, to prevent the fish they may capture

from being swallowed. When they have found their prey, they seize it with their bill by the middle, and carry it,



THE CORMORANT.

without fail, to their master; if the fish is too large, they assist each other, one seizing it by the head, and

another by the tail, and in this manner carry it to the boat together; at intervals during the sport, the thong of leather is loosened, and a portion of the fish is given to the birds as a reward for their exertion. In former times they were trained for the same purpose in England, and as late as the reign of Charles the First there was an officer who bore the title of Master of the Cormorants.

This bird is found in Europe, Asia, and America: it builds its nests on the highest part of the cliffs that overhang the sea, and lays three or four pale blueish-white eggs, about $3\frac{1}{2}$ inches long, and very narrow. In winter these birds disperse along the shores, and visit the fresh waters, where they commit great havoc among the fish. Though naturally extremely shy and wary, when glutted with food they become stupid, and are easily taken; their smell, when alive, is more rank and offensive than that of any other bird, and their flesh is so disgusting, that even the Greenlanders will hardly taste it. It is not uncommon to see twenty of these birds together on the rocks of the sea-coast, with extended wings, drying themselves in the wind. In this attitude they sometimes remain for nearly an hour, without once closing their wings, and as soon as they are sufficiently dry to enable their feathers to imbibe the oil, which, like all other Water-birds, they have the power of secreting, they press the receptacle near the tail, which contains it, and dress their feathers with it. It is only in one particular state that the oily matter can be spread on them, namely, when they are somewhat damp: the instinct of the bird teaches them the proper moment.

THE GANNET, OR SOLAN GOOSE.

THE Gannet is found in great abundance in many of

the Scotch islands, particularly on the Bass Rock in the Firth of Forth, and in the Shetland Isles.

The immense numbers of the northern birds are thus noticed by Thomson, the poet of the *Seasons* :

. . . Where the Northern Ocean, in vast whirls,
Boils round the naked melancholy isles
Of farthest Thulè, and the Atlantic surge
Pours in among the stormy Hebrides,
Who can recount what transmigrations there
Are annual made ? what nations come and go ?
And how the living clouds on clouds arise ?
Infinite wings ! till all the plume-dark air,
And rude resounding shore, are one wild cry.

The print on the following page illustrates the means employed by the inhabitants to procure the eggs and young of this and other sea-birds.

The same method is resorted to for this purpose in the Hebrides, the Feroe, and other northern islands. The cliffs which contain the objects of their search are often two hundred fathoms in height, and are attempted from above and below. In the first case, the fowlers provide themselves with a rope, eighty or one hundred fathoms in length, to the end of which a strong stick, about three feet long, is firmly attached: one of them then fastens one end about his waist and between his legs, supporting himself partly by the stick, recommends himself to the protection of the Almighty, and is lowered down by several others, who place a piece of timber on the margin of the rock to preserve the rope from wearing on the sharp edge ; a small line is also fastened to the body of the adventurer, by which he gives signals that they may lower or raise him, or shift him from place to place ; the last operation is attended with great



BIRD-NESTING IN THE HEBRIDES.

danger by the loosening of the stones, which often fall on his head, and would infallibly destroy him, was it not protected by a strong thick cap; but even this is found unequal to save him against the weight of the larger fragments of rock. The dexterity of these men is amazing; they will place their feet against the front of the precipice, and dart themselves some fathoms from it; with a cool eye survey the place where the birds nestle, and then shoot into their haunts. In some places the birds lodge in deep recesses. The fowler will alight here, disengage himself from the rope, and at his leisure collect the booty, fasten it to his girdle, and resume his pendulous seat. At times he will again spring from the rock, and in that attitude, with a fowling-net placed at the end of a staff, catch the old birds which are flying to and from their retreats. When he has finished his perilous work, he gives a signal to his friends above, who pull him up, and share the hard-earned spoil. The feathers are preserved for exportation, and the flesh is partly eaten fresh, but the greater portion is dried for winter-use. They sometimes, for the purpose of transporting themselves from one insulated rock to another, employ a kind of boat attached to a running tackle, as may be seen in the engraving.

The fowling from below has its share of dangers. The party goes on the expedition in a boat, and when it has attained the base of the precipice, one of the most daring, having fastened a rope about his waist, and furnished himself with a long pole, with an iron hook at one end, either climbs, or is thrust up by his companions, to the next footing-place he can reach; then by means of the rope he hauls up one of the boat's crew, and the rest are drawn up in succession, each being furnished

with his rope and staff. They continue their progress upwards in the same manner, till at last they reach that part of the rock frequented by the birds, and wander about the face of the cliff in search of them. They then act in pairs; one fastens himself to the end of his associate's rope, and in places where the birds have nestled beneath his footing, he permits himself to be lowered down, depending for security upon the strength of his companion, who has to haul him up again. But it sometimes happens that the person above is overpowered by the weight, and they both inevitably perish. They fling the birds they obtain into the boat, which attends their motions and receives the booty. Seven or eight days are often passed in this dangerous employ, and during this time they lodge in the crannies which they find in the base of the precipice.

The Gannet is found at times on the rocky coasts of Cornwall, preying upon the shoals of Pilchards and other fish which frequent the neighbouring seas. The bill of the Gannet is extremely sharp, and the violence with which it darts upon its finny prey is so great, that it is said to be sometimes taken by the St. Kildians by the following stratagem. A Herring being fastened to a plank, is set afloat, and the bird swooping down upon the fish, breaks its neck by the force of its descent.

OF BIRDS WITH PLATED OR SCALY BILLS. (Family, *Lamellirostri*.)

THE birds of this family have a thick bill, covered with a soft skin rather than true horn, and furnished on the edges with a row of thin prominent *laminæ*, or leaves, which, when the mouth is closed, form so many narrow

channels, or gutters, by which the water can run off without allowing the escape of the food which the bird has secured.

The broad flat inner surface of the upper mandible, also, allows room for the insertion of numerous nerves, which render the organ of touch extremely acute, and assist the bird in discovering its food in the muddiest pool.

THE SWAN TRIBE.

THE wild species of the Swan are all birds of passage, and although they are not uncommon visitors during our winter, it is seldom they arrive in any great numbers. A curious peculiarity exists in the form and position of the windpipe in many of these birds, which, instead of proceeding in an unbroken line to the lungs, is curiously convoluted or twisted in its course; this, it is said, is the occasion of the following species, and several other, having the power of uttering a variety of sounds. The tame Swan, in which this arrangement of the windpipe does not exist, is a mute bird.

THE WHISTLING SWAN, (*Cygnus ferus*.)

THIS species of Wild Swan has obtained the name of the Whistling Swan from the shrill cry which it utters, particularly when in the act of flying; it is almost a fourth less in size than the tame Swan.

In former times the Swan was considered a great delicacy, and the Goose was seldom eaten, but at present the Swan is chiefly bred for the purpose of ornamenting the waters in the parks of our nobility. The Swan, when on its native element, is one of the most graceful birds

with which we are acquainted, gliding smoothly along the water, and displaying its graceful form in a variety of elegant attitudes. Although in general a harmless bird, it is not to be approached without danger while the young are in need of its care ; at this time, both male and female unite for the protection of their offspring, and it is said



THE WHISTLING SWAN.

that its strength is so great as to enable it to break the leg of a man with one blow of its wing.

Tame Swans were formerly held in such great esteem in England, that, by an Act of Edward the Fourth, no

one, except the son of a king, was permitted to keep a Swan, unless possessed of a freehold of the value of five marks a year; and in later times, the punishment for taking their eggs was imprisonment for a year and a day, and a fine at the King's will. The King's Swans on the Thames, within certain limits, are under the especial protection of the corporation of London, and, at stated times, the lord-mayor, aldermen, and others, proceed up the river to what is called *Swan-hopping*, that is, marking the young birds. So much care is taken of this breed, that it is accounted a felony to steal the eggs.

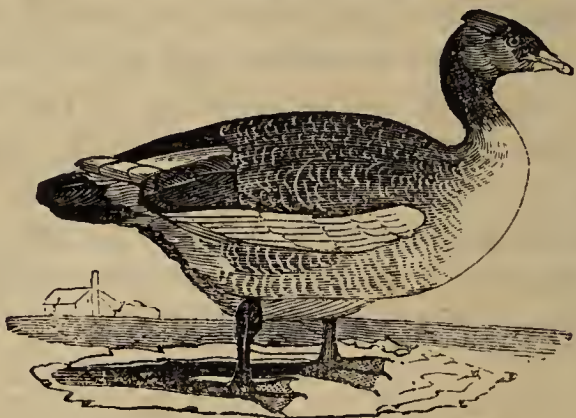
THE GOOSE TRIBE.

THE WILD GOOSE, (*Anser cinereus*.)

THE Wild Goose appears amongst us in the winter-season; it is supposed to breed in the northern parts of Europe, and to make its progress south for the purpose of reaching a more temperate climate, and obtaining a better supply of food. The Wild Geese, in their migratory excursions, fly at a great height, and arrange themselves in a very singular manner.

We are well acquainted with the tame Goose, and the various uses to which it is applied. In the fens of Lincolnshire immense flocks of these birds are kept, and great attention is paid to their nurture. They are bred for the sake of their quills and feathers, of which they are cruelly stript whilst alive: once in the year for their quills, and no less than four times for their feathers. The first plucking begins about Lady-day for both, and the other four are between Lady-day and Michaelmas.

If the cold weather should set in, great numbers of the poor creatures become victims to it. The old Geese submit quietly to be plucked, but the young ones are very noisy and unruly. The Goose is, in general, con-



THE WILD GOOSE.

sidered a stupid bird; but the following anecdote will set its character in a different light: the bird, which was called JACQUOT, had been noticed by the person who relates the story, and one day endeavoured to follow its benefactor when he left the farm-yard:—

“He no sooner saw himself separated from me than he vented strange cries. However, I went on my road, and had advanced about a third of the distance, when the noise of a heavy flight made me turn my head, and I saw Jacquot only four paces from me; he followed me all the way, partly on foot, partly on the wing, getting before me, and stopping at the cross-paths to see which road I intended taking. Our journey lasted from ten in the morning to eight in the evening, and my companion followed me through all the windings of the wood, without seeming to be tired. After this, he attended me everywhere, so as to become troublesome; for I was not able to go to any place without his tracing my steps,

so that one day he even came to find me in the church. Another time as he was passing by the rector's window, he heard me talking in the room, and as he found the door open, he entered, climbed the stairs, and marching in, gave a loud exclamation of joy, to the no small affright of the family.

"Poor Jacquot thought himself as free in the best apartments as in his own; and after several accidents of this kind, he was shut up, and I saw him no more. His inquietude lasted about a year, when he died of vexation."

"Mr. Platt," says Wilson, "a respectable farmer on Long Island, being out shooting in one of the bays, which in that part of the country abound in Water-fowl, wounded a Wild Goose: being unable to fly, he caught it, and brought it home alive. It proved to be a female, and turning it into the yard, with a flock of tame Geese, it soon became quite familiar, and its wounded wing quickly healed. In the following spring, when the Wild Geese migrate to the northward in great numbers, a flock passed over Mr. Platt's barn-yard, and just at that moment their leader happening to sound his bugle-note, our Goose, in whom its new habits and enjoyments had not quite extinguished the love of liberty, remembering the well-known sound, spread its wings, mounted into the air, joined the travellers, and was soon out of sight. In the succeeding autumn, the Wild Geese, as usual, returned from the north, in great numbers, to pass the winter in our bays and rivers. Mr. Platt happened to be standing in his yard when a flock passed directly over his barn: at that instant, he observed three Geese detach themselves from the rest, and, after wheeling round several times, alight in the middle of

the yard. Imagine his surprise and pleasure, when, by certain well-remembered marks, he recognised in one of the three his long-lost fugitive. It was she, indeed ! She had travelled many hundred miles to the lakes ; had there hatched and reared her offspring, and had now returned with her little family to share with them the sweets of civilised life. They were all living, and in Mr. Platt's possession, a year ago, and had shown no disposition whatever to leave him."

THE DUCK TRIBE.

THE birds belonging to this tribe are extremely numerous : they differ from the Geese in having the bill broader at its base than it is high, and their legs are shorter and placed much further back. The Ducks may be separated into two groups : the first distinguished by having the thumb, or short toe, bordered by a membrane, and in this division we find the Scoter, the Velvet Duck, the Golden-eye, the Pochard, the Tufted Duck, and many others. The second group have no membranous margin on the thumb, and are much smaller in the head, longer in the legs, more graceful, and much more active ; in this group are the Shoveller, the Shieldrake, the Muscovy Duck, the Pintail, the Mallard, or Wild Duck, the different species of Teal, &c.

The Duck is more easily reared than any other of our domesticated birds, and in return yields us a most nutritious and wholesome food.

The tame Duck is a favourite article of food in most countries. In France, where more attention, perhaps, is paid to subjects relating to the table than elsewhere, the

following cruel means are employed to fatten them for the market. After the Ducks have become sufficiently fat for the purpose, they are shut up for eight or ten days in a dark room. Every morning and evening the girl who attends on them, first folding back their wings, places each Duck between her knees, opens its beak with her left hand, and with her right crams it with a preparation of boiled maize (Indian corn). Many Ducks are suffocated while undergoing this operation, but they are not considered any the worse, if they are bled immediately afterwards. These unhappy creatures pass in this manner the last fifteen or sixteen days of their existence, in a state of stupor, bordering on suffocation, the effect of which is to cause their liver to grow to an enormous size. When the feathers of the tail of these Ducks spread out like a fan, and refuse to remain close together, as in the natural state, they are considered sufficiently fat; they are then taken to the water, where they are allowed to wash themselves, and are immediately after killed. The flesh of these fatted ducks is carefully taken off the bones, and well salted for fourteen days, after which it is cut to pieces and potted with the addition of a few spices, and, in this state, it is a very favourite dish.

THE EIDER DUCK, (*Anas mollissima*.)

THIS celebrated Duck is found in great abundance in the north of Europe and America; in Norway it particularly abounds, and the people of that country collect the beautiful down with which it lines its nest; when the natives find these nests, they carefully remove the female, and take away the superfluous down and eggs; she soon

begins to lay again, and covers her eggs with fresh down, which she also plucks from her breast; this she will repeat as many as three times: when she is no longer able to supply an additional quantity, the male bird comes to her assistance, and covers the eggs with down from his own breast; this may be readily distinguished from that of the female, by its being entirely white; one



THE EIDER DUCK.

female during the time of laying her eggs, will yield about half a pound weight of down, but this, when cleaned, only produces half that quantity. The extreme warmth of this substance may be well understood from the following description of Sir Arthur de Capell Brooke. Speaking of the bedding of the residents at Hammerfast, near the North Cape, he says,—

“It is composed of two soft eider-down beds, between which the party creeps; and if he were transported even into the midst of the Frozen Ocean he would suffer little inconvenience with this protection. The heat these eider-down quilts give is extraordinary; and their lightness is such, from the materials with which they are

filled, that the whole weight of them does not exceed that of a common blanket. They are on this account admirably adapted for the purposes of warmth; and every one sleeps in this soft manner, without any other clothes. I confess, however, I could never endure these arctic luxuries. On being covered up with one of these eider-down beds, it give rise to a sensation of being suffocated or smothered with an immense feather-bed, far exceeding in bulk our own, but at the same time literally as light as a feather. The heat produced was, however, to me, insupportable, and I was always glad to throw them off after a few minutes.

“The extraordinary elasticity of the down may be understood, from the fact of three quarters of an ounce filling a large hat. It is worthy of notice, however, that it is only the down taken from the nest which has this elasticity, for that taken from the dead birds is much inferior, being, as Pontoppidan says, ‘fat, subject to rot, and far from as light as what the female plucks to form a bed for its young.’ The cause of the difference has been attributed either to the down being in greater perfection at the breeding-season, or to the bird’s plucking only her finest and most delicate feathers. Like several other sea-birds, they almost always select small islands, their nests being seldom, if ever, found on the shores of the main land, or even of a large island. The Icelanders are so well aware of this, that they have expended a great deal of labour in actually forming islands, by separating from the main island promontories joined to it by narrow isthmuses.

“The reason of this preference for islands seems to be, security from the intrusion of Dogs, Cattle, and other land-animals, to whose vicinity they have so great an

aversion, that the Icelanders are careful to remove these, as well as Cats, to a distance from their settlements."

The Eider Ducks are, perhaps, more powerful on the wing than any of their tribe ; possessed of great muscular power, they can sustain themselves in the air for a length of time, ranging over the open sea for the whole of the day, and only returning at night, unless forced back by the violence of a tempest. This active mode of life shows that the Eiders do not, like the Geese, seek their food on the land, but resort to the sea for the means of nourishment ; this consists of fish and other marine animals, with which the Northern Ocean literally swarms. In the winter they are seen in immense flocks, but during the summer they generally fly in pairs.

THE WILD DUCK.

THE Wild Duck is one of our winter visitors, and appears in vast numbers, resorting to our lakes and marshes ; a great quantity of these birds are taken during the season, in various ways ; the most successful plan, where circumstances will permit, is by means of a decoy.

The manner of making and managing a decoy is as follows :—A place is to be chosen for this purpose far remote from the common highway, and all noise of people. When the place is chosen, the pond, if possible, is to be planted round with willows, unless a wood answers the purpose of shading it on every side. On the south and north side of this pool are two, three or four ditches or channels, made broad towards the pool, and growing narrower till they end in a point. These channels are to be covered over with nets supported by hooped sticks bending from one side to the other, so that they form a

vault or arch growing narrower to the point, where it is terminated by a tunnel-net, like that in which fish are caught in weirs. Along the banks of these channels, so netted over, which are called pipes, many hedges are made of reeds slanting to the edge of the channel. The whole apparatus also is to be hidden from the pool by a hedge of reeds along the margin, behind which the fowler manages his operations. The place being fitted in this manner, the fowler is to provide himself with a number of Wild Ducks made tame, which are called decoys. These are always to be fed at the mouth or entrance of the pipe, and to be accustomed to come at a whistle.

As soon as the evening is set in, the *decoy rises*, as they term it, and the wild fowl feed during the night. If the evening be still, the noise of their wings, during their flight, is heard at a very great distance, and produces no unpleasant sensation. The fowler when he finds a fit opportunity, and sees his decoy covered with fowl, walks about the pool, and observes into what pipe the birds gathered in the pool may be enticed or driven. Then casting hemp-seed, or some such seed as will float on the surface of the water, at the entrance and up along the pipe, he whistles to his decoy Ducks, who instantly obey the summons, and come to the entrance of the pipe, in hopes of being fed as usual. Thither also they are followed by a whole flock of wild ones, who little suspect the danger they are approaching. The wild Ducks, therefore, pursuing the decoy Ducks, are led into the broad mouth of the channel or pipe, nor have the least suspicion of the man, who keeps hidden behind one of the hedges. When they have got up the pipe, however, finding it grow more and more narrow, they begin to

suspect danger, and would return back ; but they are now prevented by the man, who shows himself at the broad end below. Thither, therefore, they dare not return : and rise they may not, as they are kept by the net above from ascending. The only way left them, therefore, is the narrow-funnelled net at the bottom ; into this they fly, and there they are taken.

It often happens, however, that the wild-fowl are in such a state of sleepiness or dozing, that they will not follow the decoy Ducks. Use then is generally made of a Dog, who is taught his lesson. He passes backward and forward between the reed-hedges, in which there are little holes, both for the decoy-man to see, and for the little Dog to pass through. This attracts the eyes of the wild-fowl ; who, prompted by curiosity, advance towards this little animal, while he all the time keeps playing among the reeds, nearer and nearer the funnel, till they follow him too far to recede. Sometimes the Dog will not attract their attention till a red handkerchief, or something very singular, be put about him. The decoy Ducks never enter the funnel-net with the rest, being taught to dive under water, as soon as the rest are driven in.

To this manner of taking wild-fowl in England, we will subjoin another still more extraordinary, frequently practised in China. Whenever the fowler sees a number of Ducks settled in any particular splash of water, he sends off two or three gourds to float among them. These gourds resemble our pompions ; but, being made hollow, they swim on the surface of the water ; and on one pool there may sometimes be seen twenty or thirty of these gourds floating together. The fowl at first are a little shy of approaching them ; but by degrees they come nearer :

and as all birds at last grow familiar with a scarecrow, the Ducks gather about these, and amuse themselves by whetting their bills against them. When the birds are as familiar with the gourds as the fowler could wish, he then prepares to deceive them in good earnest. He hollows out one of these gourds, large enough to put his head in ; and making holes to breathe and see through, he fixes it on his head. Thus accoutred, he wades slowly into the water, keeping his body under, and nothing but his head in the gourd above the surface : and in this manner moves imperceptibly towards the fowls, who suspect no danger. At last, however, he fairly gets in among them ; while they, having been long used to see gourds, take not the least fright while the enemy is in the very midst of them ; and an insidious enemy he is ; for ever as he approaches a fowl, he seizes it by the legs, and draws it in a jerk under water. There he fastens it under his girdle, and goes to the next, till he has thus loaded himself with as many as he can carry away. When he has got this quantity, without ever attempting to disturb the rest of the fowls on the pool, he slowly moves off again ; and, in this manner, pays the flock three or four visits in a day. Of all the various artifices for catching fowl, this seems likely to be attended with the greatest success, and is the most practised in China.

Another very singular plan of taking a species of Duck, the Velvet Duck (*Anas nigra*), is practised on the coast of Picardy, where they are found in great numbers ; a food of which they are particularly fond, consists of different kinds of shell-fish, which are found on the sands and rocks, between high and low water-mark. The fishermen take advantage of this, and ex-

tend their nets over the sands, very slightly stretched, at about two feet from the ground ; this is done at low water : as soon as the tide returns, the Ducks are seen in great numbers, diving in every direction after their prey ; those who happen to select the spot where the nets are spread, frequently become entangled and drowned ; and when the tide retreats, the fishermen return for their nets, and find the birds secured in various ways, hanging by their necks, wings, or feet. This mode of *fishing* for fowl is, however, very uncertain, the nets being not unfrequently spread many times without success, and even when the birds are taken, they are often devoured by the Sharks and Sturgeons.

THE MERGANSER TRIBE

INCLUDES those species in which the bill, thinner and more cylindrical than that of the Ducks, is armed along its edges with small pointed teeth, resembling those of a saw, and directed backwards. In other respects their plumage and carriage very much resemble the Ducks ; they are, however, much more destructive, living upon fish, of which they devour great quantities. They chiefly resort to lakes and ponds.

The principal species are the Goosander, which is a native of both the old and new worlds, in the higher northern latitudes ; it sometimes, however, visits our rivers and lakes in severe winters, but never breeds in this country. Like the rest of its tribe, it usually builds its nest among rocks, but at times it has been known, like the Comorant, to select a tree for that purpose.

The Dun Diver, which is a smaller species, weighs about two pounds and a half, while the Goosander weighs as much as four pounds ; and

THE SMEW, (*Mergus albellus*.)

WHICH is one of the most elegant of the race. Like most of the birds we have been last describing, it is only a



THE SMEW.

winter visiter, and makes its appearance when the stormy and variable weather of that season has set in, when

. The plummy race,
 The tenants of the sky, its changes speak.—
 Retiring from the downs, where all day long
 They picked their scanty fare, a blackening train
 Of clamorous Rooks thick urge their weary flight,
 And seek the closing shelter of the grove.
 Assiduous in his bower, the wailing Owl
 Plies his sad song. The Cormorant on high
 Wheels from the deep, and screams along the land.
 Loud shrieks the soaring Hern ; and with wild wing
 The circling sea-fowl cleave the flaky clouds.—THOMSON.

THE END.

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